



ESTABLISHED 1859.

Subscription: Fourpence a Week, Ten Shillings a Year.
Summer and Winter Numbers, 1/- per Copy

Remittances Payable to EDWARD HALE.

Postal Orders and Cheques to be crossed "MARTIN'S BANK (LIMITED)."

CHIEF OFFICES: 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES: MELBOURNE AND SYDNEY.

As an Official Journal

THE CHEMIST AND DRUGGIST is supplied regularly to every member of the following Societies:—

Pharmaceutical Society of Ireland.
Chemists' and Druggists' Society of Ireland.
Irish Pharmaceutical Assistants' Association.
Pharmaceutical Society of Cape Colony.
South African Pharmaceutical Association.
Pharmaceutical Society of Natal.
Pharmaceutical Society of the South African Republic.
Central Pharmaceutical Association of N.Z.
Otago Pharmaceutical Association, N.Z.
Pharmaceutical Society of Queensland.
Pharmaceutical Society of South Australia.
Pharmaceutical Society of Tasmania.
Pharmaceutical Society of Western Australia.

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Books to Buy.

"*Diseases and Remedies.*" A concise survey of the most modern methods of medicine, written expressly for chemists and druggists by physicians and pharmacists. Price 2s. 6d.; by post 2s. 9d.

"*Pharmaceutical Formulas.*" A book of useful recipes for the drug-trade. Edited by Peter MacEwan, F.C.S. Price 7s. 6d.; by post 8s.

"*The Art of Dispensing.*" Price 3s. 6d.; by post 3s. 10d.

"*Handybook of Medicine-stamp Duty.*" By E. N. Pepe, Solicitor's Department, Board of Inland Revenue. Price 2s. 6d.; by post 2s. 9d.

"*Veterinary Counter-practice*" (new edition). Price 6d.; by post 3s. 9d.

"*The Pharmacy and Poison Laws of the United Kingdom.*" Price 2s. 6d.; by post 2s. 9d.

Published by THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C., and obtainable from most wholesale houses.

Summary.

Two more steps in the saccharin litigation are reported (p. 755).

We give a full list of the chemists elected on Town Councils on November 1 (p. 762).

THE use of the word "genuine" by a firm of paint-manufacturers is alleged as a libel by a rival firm (p. 755).

A TRADE COMMITTEE of the Manchester Pharmaceutical Association has been formed to represent the P.A.T.A. (p. 750.)

THE names of those who passed the British Pharmaceutical Preliminary examination in October are given on p. 740.

A STORES MANAGER gives some statistics to show the decline in the sale of the majority of articles on the P.A.T.A. list (p. 764).

A QUININE-MAKER has had to pay damages to a householder, who lived 630 yards from the works, for injury to his furniture (p. 756).

A CANDIDATE who has attended the Spectacle-makers' Company's Diploma-examination this week describes his experience (p. 767).

MR. LEONARD DOBBIN, Ph.D., has been nominated to succeed Professor Gibson as a pharmaceutical examiner in Edinburgh (p. 740).

VICTORIA has passed a Bill to make the British Pharmacopoeia, 1898, authoritative in the colony. An interesting discussion took place on the measure (p. 735).

PROFESSOR RALPH STOCKMAN'S paper to the Glasgow Pharmaceutical Association is printed on p. 751. It is devoted to the evolution of our Pharmacopoeia.

HAMPSTEAD WORKHOUSE consumes 10*l.* worth of medicines per week, which is the record for institutions of its size. The Guardians think they can buy cheaper (p. 732).

THE BREWERS' EXHIBITION has been held in London this week. It is getting more and more a publicans' exhibition, with less of the temperance-drink element in it (p. 760).

THE UNITED KINGDOM is France's best customer—an important fact to remember in these days. An article dealing with Anglo-French trade during the past twenty-five years is printed on p. 747.

AN ENGLISH ASSISTANT presides over the Edinburgh Chemists' Assistants' Association, and has given his fellow-members an historical sketch of pharmaceutical efforts in Modern Athens (p. 750).

MINCING LANE business is somewhat disturbed by war rumours, but few articles have been affected in price. Thymol, cinchona, galls, trigonanth, and quicksilver are dearer. Opium has been in brisk demand (p. 770).

PROFESSOR TICHBORNE addressed the Pharmaceutical Society of Ireland on Monday upon the new B.P., dealing generally with the work, and giving students good advice (p. 741). We comment upon the address on p. 745.

AN IMPORTANT CASE has been argued in the Irish High Court. An apprentice of Messrs. Hayes, Conyngham & Robinson (Limited) asks the Court to compel the Council to admit him to examination. They refuse on the ground that the Company is not a firm (p. 757).

MR. HAMPSON has retired from the treasurership of the Pharmaceutical Society of Great Britain, Mr. Martindale succeeding him. Expressions of regret took up a large part of the Council-meeting on Wednesday, the rest of the business being of a routine nature (p. 741).

SEVERAL CORRESPONDENTS comment on Mr. Beecham's manifesto. The Secretary of the Dewsbury Association, and Mr. Barker, of Heckmondwike, who was said to have jarred the harmony of the proceedings by pressing for a minimum price of 1*s.*, intimate that the meeting was not so unanimous as the report made it appear (p. 764).

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

The Coroner's Crust.

Dr. Danford Thomas, the Coroner, has had a narrow escape from figuring at an inquest in another capacity than that in which he usually appears. He was holding an inquiry, on Saturday last, respecting the death of a servant at the North-Western Fever Hospital, Haverstock Hill, who had drunk some nitric acid. In the course of the hearing, the Coroner, to illustrate the ease with which poisons were supplied by oilmen, stated that the other day some carbolic acid was ordered for his house, and it was sent by the oilman in a vinegar-bottle covered with vinegar-labels. One of his servants used it to fill the vinegar-cruet, and it was served at table, where it was only detected by the smell.

Microscopical Examination of London Water.

At the weekly meeting of the London County Council on Tuesday last, on the recommendation of the Water Committee, it was agreed "that the chemist be authorised to continue the six examinations a week of the water of each of the companies for a further period of three months from and including November 1, 1898, at a cost of 15*l.* a week." The chemist had pointed out that his examinations of the water (from July 5 to October 31) had been exceptionally favourable to the companies, as it covered a long period of drought. He thought it desirable that they should be tested during the flood period also.

Expensive Drugs for the Poor.

The Local Government Board have informed the Isle of Thanet Guardians that a Select Committee of the House of Commons had recommended that expensive drugs to paupers should be provided for out of the rates, and they were requested to give the matter their attention when future appointments of medical officers were made.

The Hampstead Goose's Golden Eggs.

At a meeting of the Hampstead Guardians on October 27, the recommendation of a special committee to appoint a dispenser at the workhouse, and a non-resident medical officer at a salary of 150*l.* per annum, was considered. Hitherto the dispensing has been done by a person employed by Dr. Cook, who has just resigned the medical officership after sixteen years' service. The Rev. S. B. Burnaby, in moving the adoption of the recommendations, said he anticipated that the Board would thereby save a great deal of money. The old system led to great waste. For instance, about eighteen months ago twelve bottles of emulsion, at 4*s.* 6*d.* each, were ordered. They were all on the shelf now, and as it was doubtful if that particular stuff would keep for eighteen months, the bottles were probably not worth a farthing. He was informed that, instead of making their own pills on the premises, they were all ordered at the local chemist's, the cost being 1*s.* or 1*s.* 6*d.*, instead of 1*d.* or 2*d.* for each box. Again, certain medicines, instead of being dispensed in the ordinary way, were given in accordance with the French method in cachets, the difference in cost being as 1*s.* 8*d.* is to 1*s.* He was told that doctors never ordered cachets except for very wealthy patients. The total cost of the drugs used in the workhouse last year exceeded 520*l.* Mr. J. R. Cooper seconded the motion. Major Sheffield said the cost of the drugs used in the Hampstead Workhouse was heavier than in any workhouse of the same size in the United Kingdom. Mr. Potter suggested that a lady dispenser should be appointed. The recommendations were adopted.

The Ventnor Libel-charge.

At the Central Criminal Court, on October 27, James Dunning, chemist, Ventnor, surrendered to his bail, and pleaded guilty to publishing a libel concerning Ada Brown. Mr. C. F. Gill, for the defendant, made an unqualified apology, stating that the allegations contained in the letter he had written concerning Miss Brown were wholly unjusti-

fable, and he withdrew every imputation. Defendant would undertake not to repeat the libel, and was willing to pay all the costs of the prosecution. He asked that the defendant should only be bound over to come up for sentence if called upon. Mr. Mathews, for the prosecution, did not object, and the defendant was bound over in his own recognisances of 500*l.* to be of good behaviour.

Window-smashing.

At the Clerkenwell Sessions, on November 1, James McKenna was found guilty of causing wilful damage to the amount of 11*l.* 17*s.* 6*d.* to the premises of Messrs. Glyn & Co., chemists, in East India Dock Road, by throwing his boots through their shop-window. Sentence was deferred pending inquiries as to prisoner's antecedents.

Shop-breaking.

On October 31, at the Shrewsbury Police Court, Andrew Martin, hawker, and Charles Downs, labourer, were charged with breaking into the shop of Mr. H. J. Ison, chemist, Shrewsbury, and stealing 4*s.* The thieves gained an entry by smashing a window-pane at the back part of the shop, and then undoing the fastening. The money, which was all in coppers, and most of it in halfpence, was taken from the till. Martin was taken to the police-office on the day following the robbery on a charge of being drunk and disorderly, and on being searched 1*s.* 9*½d.* in coppers was found in his pockets. Subsequent inquiries led to the arrest of Downs. Both prisoners pleaded guilty, and were remanded.

A Chemist and his Wife.

Herbert Holgate, chemist, of Rowbarton, was summoned by his wife, Mary Meade Holgate, at the Taunton Police Court last week, to show cause why a judicial separation should not be granted. The complainant alleged persistent cruelty on the part of her husband, and in the course of her evidence stated that she advanced him 250*l.* last year to purchase the business of Mr. F. Wellington, chemist, Taunton. She had been subject to constant ill-treatment since then, and ultimately left him. The defendant did not appear, and the Bench granted a judicial separation, ordering defendant to pay 1*l.* a week towards the maintenance of his wife.

Hour of Closing at Margate.

The following chemists and druggists of Margate have intimated their intention of closing their establishments at 8 o'clock daily during the winter months from November 1:—Messrs. D. T. Evans, Victor Woolls (Thanet Drug Company), E. Wootton & Son, W. H. Harvey, P. Holmes, S. K. Cadby, John Reeve, J. Baily & Co., H. Brooks, and R. Pettman.

Sale of Laudanum.

Mr. Ernest Harold Aves, chemist, East Kirkby, Notts, sold 4 oz. of laudanum to a gentleman who said he wanted it for cattle and for general uses, and promised if Mr. Aves would charge him the same price for it as he paid in Nottingham he would always get it from him. He took some of it and died. At the inquest Mr. Aves was questioned about the law as to selling laudanum, and the jury added to their verdict that, whilst the chemist had no doubt acted in accordance with the law as it stands, they were of opinion that the facilities for obtaining laudanum should be more safeguarded than they were at present.

Presentation.

The friends of Mr. D. S. Park, Spennymoor, entertained him to a supper and presented him with a pipe and mounted walking-stick, on the occasion of his leaving Spennymoor to commence business at Hartlepool. Mr. Park was apprenticed with Mr. G. T. Farthing, chemist, of Spennymoor.

Mistake in Bottles.

Sarah Heard, 41 years of age, wife of a Dover tallowman, being unwell in bed, had a bottle of carbolic acid and a bottle of port wine on a table by the side of the bed. She took some of the former in mistake for wine, and died. The Coroner said at the inquest this was the second death to his knowledge resulting from carbolic acid distributed by the Corporation.

Smoking-concert.

The Prosser Roberts Drug Company, Camberwell, held a smoking-concert at the Lion and Doves Hotel, Camberwell, on October 28, Mr. Longstaff (the manager) in the chair.

Football.

Metropolitan College of Pharmacy v. South London School of Pharmacy. Played at Wormholt Farm, Shepherd's Bush, on Saturday, October 29. Result: Metropolitans, 4; South London, 0.

Fire.

At Netham Chemical-works, St. George, Bristol, on October 25, a fire broke out in the chlorate-of-potash mill-house. Three private hydrants were got to work, and the fire was extinguished in a short time, but the contents of the mill-house were severely damaged, and one of the workmen was slightly burnt. The cause of the fire is unknown. The premises were insured.

The C.A.A. Cinderella.

The opening Cinderella of the fourth series was held in the Dorset Hall, Portman Rooms, on Thursday, October 27. The attendance was not up to the usual average, owing, perhaps, to the fact that an earlier date than usual had been fixed for the inaugural dance. Messrs. C. W. Martin and A. J. Solomon again officiated as M.C.'s.

Blue Vitriol to Horses.

At Spalding Petty Sessions on November 1, a farm-servant was summoned by his employer for administering poisonous drugs to horses. The defendant was horsekeeper to the complainant, and he had administered blue vitriol (which he had procured from a local chemist), also salt-petre and resin, to four of plaintiff's horses. It was stated that probably the horses would have been killed but for the matter being discovered in time, and a claim of 10*l.* for damages was made. Comment was made upon the facility with which farm-servants could obtain these drugs, and the Court found for the amount claimed, with costs.

Smashing the Church-windows.

At East Dereham Petty Sessions, on October 28, Hugh MacLachlan, chemist, Dereham, was charged with wilfully smashing three memorial stained-glass windows in the Cowper Congregational Church. The defendant did not appear. Mr. Jewson, who appeared for the trustees of the church, asked permission to withdraw the prosecution, as the defendant had paid an agreed amount for damage and expenses, and had tendered apologies to the pastor of the church and the trustees for his conduct. The offence was committed as the result of a dispute as to a right of way at the back of the church and defendant's premises. The Magistrates allowed the case to be withdrawn.

The L.C.C. and Shop-lamps.

A meeting of retail traders was held at the London Chamber of Commerce, on November 2, for the purpose of considering whether concerted action should be taken with a view to securing the modification or withdrawal of the L.C.C. by-laws concerning lamps and other structures overhanging the footways. Mr. J. Gluckstein, who presided, said that under the proposed by-laws every lamp or sign must be not lower than 10 feet above the roadway, 3 feet from the kerb, not more than 2 feet wide or 4 feet high, and not above a certain weight; no lamp should project more than 4 feet from the main wall of the premises; no lamp should contain any advertisement, device, or writing except describing the premises or name of the occupier; and that lamps should only be lighted at such times as might be sanctioned by the local authority. Many of those proposals were very objectionable, and he hoped every effort would be made to induce the Council to either withdraw the proposal altogether, or else to greatly modify it.

Mr. Pomeroy, L.C.C., said that the proposed regulations had never been seriously considered by the present Council. They were really brought forward by the late Council, and had been suggested not by practical men, but by officials of the Council, who were evidently unacquainted with the requirements of shopkeepers.

After considerable discussion the following resolution was unanimously carried:—

That this meeting of members of the London Chamber of Commerce interested in the retail trade, having considered the proposed L.C.C. by-laws for the regulation of lamps and other structures overhanging the footways outside the City, is of opinion that considerable modifications are absolutely necessary; that those present be constituted a provisional committee, with power to add to their number, to watch the matter with a view to such future action as may be necessary in the interests of retailers generally; that a copy of this resolution be sent to the L.C.C., with a request that if revised regulations are issued the Chamber may be favoured with an early copy of the same.

The Glass-bottle Trade.

A largely-attended meeting of glass-bottle workers was held at Sunderland on Saturday to listen to an address from Mr. E. J. Smith, of Birmingham, explaining his scheme for a joint union of masters and men engaged in the glass-bottle trade. The object of the union is to bring about an abatement of the undue competition of the various firms, to avoid strikes, and to guarantee constant employment and fair wages to the men. He said he thought the masters generally were very favourably disposed towards the scheme. After the address a discussion ensued, and the meeting, which represented about four hundred men engaged in the trade, approved of the proposals. The scheme is expected to come into operation some time in February next, and it is anticipated that it will completely reorganise the glass-bottle-making industry throughout the country.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Ruined by Cheap Lady Labour.

The Belmullet Guardians recently invited candidates for the position of dispensary officer to the Knocknawlower district. Only two candidates entered, and both were of the gentle sex. The Guardians object to lady-doctors, and the salary offered is apparently not sufficient to tempt a "medicine-man." The matter has been stayed off for the present.

Athy will Buy the B.P.

The Athy Guardians, wanting to have a copy of the new Pharmacopoeia, intimated their desire to the Local Government Board. The L.G.B. tell them there is no objection to the volume being brought into use, but the cost must not be claimed as an item of expenditure. The Clerk gave it as his opinion that the book in question would cost 3*l.* 3*s.* a copy. Two copies were ordered to be purchased.

Rat-killing in Dublin.

One evening last week Dublin was suddenly plunged into darkness through the failure of the electric light. On investigation it was found that the breakdown was caused by a rat, which got into one of the electric mains and gnawed through the insulating-material covering the conducting-wires. The rodent was electrocuted, and a charred mass was all that remained of him when the defect was located.

Dispensing is Important.

The Skibbereen Guardians recently resolved to pension Dr. Hadden, an old official of the Union, but allowed him to retain the position of compounder of medicines at a small salary. The Local Government Board have vetoed the arrangement, for the reason that if a man be incapacitated from performing his duties as medical officer, he is also unfit for the not less responsible duty of compounder; also that no superannuation allowance could be given to Dr. Hadden while he acted as chemist to the Union.

A Bad Debt.

The Local Government Board have written to the Croom Guardians relative to certain medicines supplied by the apothecary to the workhouse, pointing out that as the goods

in question were improperly requisitioned it would establish an inconvenient precedent to sanction the payment, and that, moreover, the apothecary, being a paid officer of the Union, had, in supplying the articles, rendered himself liable to a penalty not exceeding 100*l.* The Clerk said the matter referred to was the supply of a small quantity of drugs. He (the Clerk) declined to pay, as he would be surcharged.

Medicine-contracts.

At a meeting of the Cork Guardians, on October 27, a letter was read from Messrs. P. J. Leslie & Co., Dublin, explaining that the reason they did not tender this year was because they had heard on good authority that their tender was on several occasions much lower than that of the firm who got the contract, and consequently it was only a farce for the Board to advertise for medicines at all. Several Guardians referred to the statements contained in the letter as "serious" and "discreditable" if true; and ultimately the Board directed the Clerk to write to Messrs. Leslie for further explanation.

The Chemist and his Horse.

In the action brought against Mr. Thomas J. English, pharmaceutical chemist, Rathgar Road, Dublin, by a Mr. Bennett, who claims damages for personal injuries suffered by him by being knocked down by a horse which Mr. English's servant was driving, counsel for the latter moved that the case might be remitted for trial to the Recorder's Court. The plaintiff said that Mr. English kept racehorses and trained horses, and was in the habit of driving fast and furiously horses not trained to harness. The defendant says he does not train harness-horses, nor is he in the habit of driving furiously. The horse in question was one which had been several years in harness. He alleges that the plaintiff might have got out of the way when he was called to as the horse had bolted. The Court refused the motion, and allowed 6*l.* 6*s.* costs.

An Apprentice's Action.

At the Ennis Quarter Sessions, on October 18, John Vaughan, 35 Rathmines Road, Dahlin, brought an action against Dr. J. M. Mangan, Ennis, for 50*l.* for breach of an indenture of apprenticeship, by which the defendant agreed to instruct plaintiff as a pharmaceutical chemist for a term of three years, but on December 27 last compelled plaintiff to leave his establishment.

John Vaughan related how that, on returning from a Christmas visit to his uncle, Father Vaughan, Dr. Mangan would not admit him; and, on his returning the next morning, he was told to take his departure. He thought the reason was because he had gone away at Christmas without leave.

Dr. Mangan gave evidence, in which he alleged that Vaughan was unpunctual in arriving at the shop, and that he was dull at learning. Witness told Vaughan that if he left on Christmas-day he should under no circumstances take him back again.

After further evidence had been given, his Honour dismissed the case on its merits.

Scotch News.

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Smoking-concert.

The employés of Mr. James Taylor, wholesale druggist, Glasgow, and their friends, making a company of about 100, were present at a very successful smoking-concert held in McCulloch's, Maxwell Street. Mr. John Taylor presided.

The Cycling Chemist has to Pay.

Arthur P. Manners, a chemist's assistant, of Kilmarnock, was cycling down a hill and ran into William Lymburn, who was also on a cycle. He knocked William off his cycle into the ditch, injured him, and damaged his bicycle. William's

hill was 6*l.* 10*s.*, which the Sheriff said was very moderate, and gave decree for the sum to be paid.

Presentation.

Mr. James R. Watson, late senior assistant with Mr. John McMillan, 17 Great Western Road, Glasgow, has been presented by the staff and a few friends with a number of books, including the British Pharmacopoeia, Remington's "Pharmacy," "Pharmaceutical Formulas," "Martindale," &c., on the occasion of his leaving the firm to open a pharmacy at Springboig, Shettleston, a rising suburb.

Action Settled.

An action brought by Mrs. Ann Healy, of Pollokshaws, against Messrs. Law & Co., chemists and mineral-water manufacturers, Glasgow, for 250*l.* damages for personal injuries has been settled by defendants making a payment of fifty guineas and expenses. The plaintiff had been knocked down and injured by a horse and lorry belonging to and driven by a servant of defendants, who was afterwards fined for driving in a reckless manner.

A Partnership Dispute.

At the Court of Session, Edinburgh, on October 28, judgment was given in counter actions between two dyewood manufacturers and drysalters, T. McArthur, of Liverpool, and W. H. Scott, of Glasgow. They had carried on business together in Glasgow under the title of McArthur, Scott & Co., from 1882 to 1897, when McArthur withdrew from the business. Scott exercised the option given him in the deed of partnership whereby he agreed to pay McArthur 18,223*l.*, his share of the capital, in three instalments. McArthur, however, claimed 2,000*l.* from Scott, being interest at the rate of 5 per cent., which he contended was due until full-payment of his share was made. Lord Low held that as no stipulation was made in the contract regarding interest, Scott was not liable, and the action was dismissed, with costs.

Claim by a Chemist's Widow.

In the Court of Session, Edinburgh, on October 28, Lord Low disposed of an action brought by Mrs. Jane Anderson Campbell, or Leask, widow of the late Mr. John Leask, jun., chemist and druggist, Easter Road, Edinburgh, against the Fourth Edinburgh Investment Company. Pursuer's husband left a will conveying to her the shop, back shop, and cellars in Easter Road belonging to him. Defendants held a bond over the property for 650*l.*, and pursuer offered to pay the balance of 427*l.* 12*s.* due on the bond on condition that the defendants gave her an absolute conveyance of the property. A clause in the will provided that in the event of the pursuer marrying again her interest in the property would become null and void, and the defendants said that this clause so restricted her rights that they would not be safe in granting her an absolute conveyance. Lord Low held that the widow's rights were not forfeited, and ordered the defendants to grant an absolute conveyance, the expenses to be paid out of the estate.

Welsh News.

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The Chemist's Claim.

At a meeting of the St. Dogmael's Rural District Council held recently, reference was made to a claim by Mr. J. Williams, chemist, Newport, Pembrokeshire, for loss of office (after thirty-seven years' service) as Treasurer of the Newport District Highway Board. The claim had been sent to the County Council, and the Clerk, in acknowledging receipt, said he feared the claim would not come within the province of compensation, but it would have to be submitted with statutory declaration.

Only Fun.

At Llandilo Petty Sessions four lads were charged with breaking into the shop of Mr. W. E. Rees, chemist,

Llanidloes. The prosecutor said that whilst in the kitchen he heard a noise in the shop above, and, on going up, he found two of the lads hiding in the shop and two outside. The shop-door had been forced open, cigarette-boxes disturbed, and a woman who went into the shop was kicked by one of the lads. For the defence, it was urged that the whole episode was the result of some horseplay between the lads and the shop-assistant, the shop-door being burst open accidentally. The Bench dismissed the case.

Australasian News.

From "The Chemist and Druggist of Australasia" for September, 1898, copies of which, price 6d., may be obtained on application to the Publisher.]

MR. SIDNEY H. VAUGHAN, the new President of the Pharmaceutical Society of Queensland, elected at the August meeting, was born at Greenhithe, Kent, England, and served his apprenticeship in London. He has been in business as a chemist in Queensland for over twenty years.

THE SUMMER ISSUE OF "THE CHEMIST AND DRUGGIST" arrived in Melbourne on August 31. On September 1 two of the advertisements were displayed in one of the best shops in Melbourne. This was Pears' soap—the young lady with the eyes—and the Erasmic herbal-soap advertisements.

LEA & PERREINNS SAUCE.—On August 8 three oyster-saloon keepers were before the District Court, Melbourne, on charges of falsely applying a trade-description. It was shown that they had in their shops, and placed before customers, bottles having Lea & Perrin's name blown in them and bearing that firm's label, but containing sauce not of their manufacture. Fines of 1*l.*, with 2*l. 6s. 8d.* costs, were inflicted in each case.

A SOCIETY OF PHARMACISTS FOR NEW SOUTH WALES.—One of the principal topics of conversation in pharmaceutical circles in New South Wales is the proposal to form a second Society in opposition to, or distinct from, the Pharmaceutical Society of New South Wales. The main supporters of the new organisation are to be drawn from the men registered under subsection "d" of the Pharmacy Act, and those who are dissatisfied with the present management of the Pharmaceutical Society.

CHLORODYNE LOZENGES.—Complaints have been received by the Pharmacy Board of Victoria regarding the sale by confectioners of lozenges composed of liquorice, linseed, and chlorodyne, which are sold without any restriction or caution whatever to children. Several accidents of a serious nature have occurred in Melbourne to children through eating them, and the Board has decided that an intimation should be sent to the daily press asking that attention might be drawn to the danger to the public, and especially to young children, by the sale of these lozenges.

A WESTRALIAN INTERNATIONAL EXHIBITION is to be held at Coolgardie from March 21, 1899, under the direct patronage of the West Australian Government. It will be opened for at least three months. It was originally intended to be specially a mining-machinery exhibition, but it has been lately decided to extend its scope to all industries. There is a special section for chemistry and apparatus, including pharmaceutical products. The arrangements for Great Britain and the Continent are in the hands of Mr. E. T. Scammell, who has been appointed special commissioner and official agent, whose office is at 18 Queen Victoria street, E.C.

THE BRITISH PHARMACOPEIA.—On September 6 the Hon. Sir H. Cuthbert introduced into the Legislative Council of Victoria a Bill to provide for the adoption of the British Pharmacopœia. It was issued on September 9, and passed its second and third reading in the Legislative Council on September 14. It now has to come before the Legislative Assembly. There is nothing in it of a contentious nature, and there is no reason to doubt that it will pass. The Bill provides that notice of the substitution of the British Pharmacopœia,

1898, for the Pharmacopœia in force in Victoria at the time of the passing of this Act shall be published in the Government Gazette immediately after the passing of the Act, and whenever any alteration of the British Pharmacopœia is made it shall be lawful for the Governor-in-Council by notice in the Government Gazette to declare that on and after a specified date it shall have force in Victoria. Sir Henry Cuthbert, in moving the second reading of the Bill, said that the Government has been urged by the Pharmacy Board and the Victorian branch of the British Medical Association to introduce it. The Hon. F. S. Grimwade said he had had experience of something like five Pharmacopœias, published during the last forty years. The new Pharmacopœia he considered very excellent, although he did not altogether agree with some of the alterations which had been made. The Bill, he thought, should be made compulsory, so that medical men should be prevented from writing prescriptions according to either of the old Pharmacopœias. After some remarks from the Hon. W. H. Embling, a medical man, the first reading was agreed to. On committing, Sir Henry Cuthbert said a medical man might write his prescription under the Pharmacopœia of 1890, if he so stated; but if he did not make that statement, it would be made up under the Pharmacopœia of 1898. Mr. Grimwade: What will be done to the chemist if he does not? Sir Henry: In that case he would have to take the consequences. He might have to answer for it before the coroner.

South African News.

(From our own Correspondents.)

A CANADIAN REPRESENTATIVE.—The Eastern representative of Messrs. Davies & Lawrence (Limited), Montreal, Canada (Mr. Hackett), arrived at the Cape just before the mail left. He will remind everyone of "Pain-killer" and its virtues before proceeding East again.

TRAVELLERS' TAX.—The Natal Government, immediately on the Customs Union being an accomplished fact, will levy a travellers' tax similar to that of other South African States. Those interested should note that by arriving at the Cape about July or August a half-yearly licence is granted. Many travellers have occasion to call on South Africa once a year only, and the saving on the round trip amounts to about 50*l.*

PATENT MEDICINES.—Parliament opened on October 10. The Governor recommended attention to the Customs Union Tariff, which has already been ratified by the Governments of the Orange Free State and Natal. The Pharmacy Bill is not expected to be dealt with for some months, as the Redistribution Bill will take up much time and attention. The general feeling in trade-circles at the Cape is that it is only intended to apply to compounds containing poison, and that the name of "poison," together with the quantity to the dose, must appear.

THE SMALL-POX SCARE in the Cape has to a great extent spent itself, but in Johannesburg cases among the native population are of more or less frequent occurrence, and are promptly dealt with by the authorities, who make a grand pretence of isolating all the cases. Whether the disease, which has broken out in nearly all the South African cities and towns is really small-pox or not has never been proved. The medical men appear to hold different opinions as to its true nature, and although they vaccinate, it is more from a professional habit than anything else.

BETTER VACCINE WANTED.—The efficiency of the lymph supplied by the Cape Government from the Institute at Grahamstown varies with the class of patient treated. On patients with whom vaccination was new the result was highly satisfactory; but on Europeans, many of whom have been vaccinated time after time, no apparent results follow. Several medical men in the Government service absolutely refuse to use colonial vaccine, and it is an open secret that those who do use it only do so because they are forced by superior powers. Three weeks ago [our correspondent wrote on October 10] there was not a single

tube of English or German lymph in Cape Town; now there is upwards of 300, with further supplies on the way.

AN ADVENTUROUS CAREER.—Mr. Edwin C. Broadbent, who was twenty years ago an apprentice with Mr. Bowman, pharmaceutical chemist, Douglas, Isle of Man, has died of fever at Myangui, Rhodesia. He had had an adventurous career, and had explored a considerable area of the latest addition to the British Empire. He went through the whole of the Zulu war, and got his commission as lieutenant in the Frontier Light Horse. In the more recent Matabele disturbances, he and twelve others were surrounded by a host of the enemy, whom they kept at bay for twenty-three days, when they were rescued by a force sent to their assistance from Fort Salisbury. Every member of the party who survived was wounded, and Mr. Broadbent never quite recovered from the terrible strain, and was unable to withstand an attack of fever.

GERMAN TRADE WITH SOUTH AFRICA.—The official statistics given below relate to South African imports from Hamburg (the chief German port), during 1897, of articles allied to the drug-trade:—

Drugs, Chemicals, &c.	Cape Colony and Natal		Transvaal	
		£		£
Carbolic acid	6 tons	203	—	—
Cyanide of potassium ...	34 "	2,800	782 tons	56,657
Drugs and chemicals (various)	88 "	6,664	14 "	526
Essences and extracts ...	25 "	2,066	3 "	205
Ether	7 "	379	—	—
Glycerin	—	—	645 "	36,358
Medicinal leaves and flowers	2 "	143	—	—
Perfumery	54 "	4,946	7 "	741
Quicksilver	—	—	2 "	397
Quinine and salts of quinine	284 lbs.	161	—	—
Salicylic acid	1 ton	204	—	—
Sugar of lead	5 tons	102	—	—

It should be noted that the figures refer only to Germany's direct over-sea trade with South Africa in German bottoms, *via* Hamburg, no shipments of any consequence being made to that country from other German ports. The German imports from Cape Colony and Natal include aloes, 40 tons, valued at 776*l.*, and medicinal leaves and flowers, valued at 171*l.*

French News.

(From our Paris Correspondent.)

OBITUARY.—The death is announced of M. Claude Reverchon, "father" of the pharmaciens of Lyons, in his eighty-third year. M. Reverchon retired from business some years ago, and has since devoted much of his time to works of charity. He well understood the "art of being a grandfather," and was very popular with all classes and especially the poor.

"LE GUIDE MILITAIRE DES ÉTUDIANTS" is a book which has just reached its fourth edition, and gives amongst other matter a good deal of useful information concerning Army surgeons and military pharmacists. The price is 8*f.*, and pharmacien-major Bodard has contributed the information regarding his branch of the service.

FRENCH COLONIAL PHARMACISTS who pass examinations in the colonies enjoy none of the prerogatives which attach to diplomas obtained in France, and they have not the right to practise their calling in this country. But the committee of medicine and pharmacy connected with the commission of public teaching have decided to offer colonial pharmacists increased facilities for obtaining the full diploma. With a view to this they are to be allowed to dispense with the apprenticeship in France, also the three years' attendance at a school of pharmacy, and other advantages.

DREYFUS'S LUXURIES.—One of the most enterprising of Paris newspapers, *Le Matin*, is publishing a series of articles by M. Jean Hess, a smart French journalist, or ex-Captain Dreyfus at the Ile du Diable. M. Hess went to French Guiana to get his information, and although his individuality, as well as the object of his visit, were known, he is able to furnish a surprising amount of detailed information. Thus he says: "Dreyfus knows he is the centre of attention, and that is why he endeavours to take care of himself in order to remain in good health. For instance, amongst the articles asked for by him recently were the following: One bottle of granulated kola or tablets of kola chocolate, two bottles of Hunyadi Janos, two bottles of orange-flower water, one litre of spirits of wine, six bottles of soda-water, five kilogrammes of soap, while perfumes and potted meats are also included in the list."

THE DUTY ON ALCOHOL.—Amongst the measures that have been taken here with the supposed object of favouring agriculture was a law passed towards the end of last year to abolish all the octroi or town dues on so-called "hygienic liquids," such as beer, wine and cider. The revenues derived from this source by the City of Paris have been yielding about fifty-seven million francs annually. A few days ago the Municipal Council voted certain new taxes that are to be created to meet this large deficit. Included in these is an increase of 85*f.* per hectolitre (22 gallons) on pure alcohol, making the Excise and City dues it now pays 351*f.* per 100 litres (say, 12*s. 9d.* per gallon); this has become operative at once in order to prevent large quantities of alcohol being brought into the City under the old octroi tariff. An increase in the alcohol-tax had been anticipated in Paris for some time past, but the comparative suddenness with which it was applied was a vexatious surprise in a number of industries. The perfumery-trade was amongst these, and I hear that one Paris firm instructed its travellers to suspend business for forty-eight hours. This appears to have been necessary to work out the cost of articles on the basis of the new tax and establish a new price-list. Of course, perfumery is considered to be an article which can bear an increase in taxation as well as any, and under the system of exporting from bond, buyers abroad ought not to have to pay higher prices for French perfumery, though foreign manufacturers sending such goods here will have to reckon with the new tax. Paris wholesale druggists have also been obliged to increase their prices for all pharmaceutical preparations containing alcohol.

Colonial and Foreign News.

SUNLIGHT FOR GERMANY.—Lever Brothers (Limited), of Port Sunlight, have bought a site for a soap-factory in the Mannheim district.

GERMAN MINERAL-WATER MANUFACTURERS.—At a recent meeting, resolved to establish a Union and to associate themselves with the Industrial League.

BUSINESS-CHANGE.—Mr. A. E. Samarasekare has purchased from Mr. A. R. Ephraums the stock-in-trade of his late business of chemist and druggist at Matara, and the business is now established at No. 7 Main Street, Fort, Matara, Ceylon.

PHARMACY IN ARGENTINA.—In order to register as pharmacist in the Argentine Republic one must pass a preliminary examination, serve a two-years' apprenticeship, and take a three years' course of study. Each yearly course closes with an examination in the subjects of the year, and at the end of the curriculum a general examination is held in all branches.

MANILA CUSTOMS DUTIES.—The Board of Trade have received through the Foreign Office a despatch from His Majesty's Ambassador at Madrid, stating that, according to the Spanish press, the Minister for the Colonies has received an official telegram from Manila informing him that the Spanish Customs tariff will remain in force until November 10. It is intimated that on that date the United States tariff will be enforced, and that Spanish goods will thereafter receive the same treatment as other foreign merchandise.

Pharmaceutical Society of Great Britain.

COUNCIL MEETING.

AT the meeting on Wednesday Mr. Hampson, the Treasurer, tendered his resignation on the score of ill-health. Several members of the Council testified to the worth of the Treasurer, who had been twenty-six years on the Council, and for eight years had been Treasurer. A ballot was taken for the election of a successor, and Mr. W. Martindale was almost unanimously elected. Mr. Martindale is at present cruising in the Mediterranean, and the President mentioned, as an instance of his constant thought for the Society, that he had sent them a copy of the new pharmacy regulations at Gibraltar. These were printed in the *C. & D.* last week (page 705). The Council have sanctioned the closing of the Library and Museum in the evenings of the coming year, except on the nights when evening meetings are held, when they will be open till 8. Some discussion took place in regard to the poison regulations which the Society refused to adopt some years ago. It was felt that the time had arrived for the Society to put its house in order before approaching Parliament again. The matter was left for the present. Local secretaries were appointed for those places from which nominations had been received; forty-two places had not replied to the notices sent, which caused the President to remark on the remarkable apathy of chemists when Society matters were at stake. The list of superintendents of written examinations was left as it was last year. It is noticeable that two or three of the members made ejaculations when the big list of failures in the October Minor was read out, but none ventured to inquire why. Mr. Ince has presented some books containing 500 autograph prescriptions for the use of the Society. The Council were puzzled over a resolution they received from the Chemists' Assistants' Union, and seemed not to know what it meant. Mr. Carteighe took the occasion to remark that it was a pity that gentlemen banded together for improving their trade conditions did not take the trouble to find out what conditions existed; the same remark might apply to the Council itself. Mr. Rutherford Hill, the Assistant-Secretary in Scotland, sent a resolution from the Executive thanking the President for the trouble he had taken over the Pharmacy Acts Amendment Act, and wanting to know what they were to do next.

The meeting commenced at 11.20 A.M. There were present the President (Mr. Walter Hills), and Messrs. Allen, Atkins, Bateson, Bottle, Carteighe, Corder, Cross, Grose, Newsholme (Vice-President), Savory, Southall, Symes, Warren, and Young. Mr. Harrison, it was announced, was engaged as a returning-officer in one of the wards at Sunderland.

The minutes of the previous meeting were read and confirmed.

MR. HAMPSON RESIGNS.

The PRESIDENT said the first business was to read a letter he had received from Mr. Hampson, dated October 25, from Leonard's, in which he said he had no thought that when he attended the Council meeting in October it would be his last. Since that meeting he had had a severe attack of illness, which compelled him to resign the membership of the Council and the treasurership of the Society which he held. He felt very deeply at having to sever himself from old friends, and with whom it had been his privilege to take part in the management of the Society; the memory of those times would remain to him as a treasured inheritance. The letter concluded with an expression of regret that he had not been able to effect a reform in the method of electing annuitants to the Benevolent Fund. It was a merciful

campaign, and he hoped someone on the Council would take the matter up and bring it to a successful issue. His interest in the Society would remain undiminished, and he would welcome every step that will tend to give stability and importance to it.

The President said he thought he was only acting as a mouthpiece to them all in saying that he received Mr. Hampson's resignation with most extreme regret. He (the President) had taken steps to find out if the letter represented Mr. Hampson's determination in the matter, and was informed that it was impossible for him to remain a member of the Council, owing to the unsatisfactory state of his health. Continuing, the President said they all knew that Mr. Hampson suffered considerably from weakness of body, and they all

ADMIRED HIS PLUCK

in coming to their meetings when a less determined person would have stayed away. When he looked around him and found so few there who were his seniors, he was all the more regretful to lose another. His earliest recollections of Mr. Hampson was in connection with the admission of women as members and associates of the Society; it was a subject which he (the President) supported at the general meeting when the subject came up. Mr. Hampson also filled a prominent part in pharmaceutical politics at the time of the passing of the Pharmacy Act in 1868, when there were very strained relations between different individuals connected with their calling; but he (the President) would rather speak of Mr. Hampson in connection with the seventeen years he had sat with him on the Council. He was thoroughly interested in the work of the Society and the progress of pharmacy, and although he never spoke at great length on any topic which came before them, he took a very great general interest in everything. Mr. Hampson was a most useful member of the Benevolent Fund Committee, in which he took a deep interest. He was sorry he was unable to say all he felt on the matter; they would miss him much, and, although he often differed in opinion from Mr. Hampson, such difference never disturbed the good feeling between them. It was almost impossible to come to loggerheads with such a man. He was thoroughly free from cynicism. They would all miss him much on the Council, and in regard to the matter of annuitant election for the Benevolent Fund they felt the matter was not practical for the present. He hoped that the rest and change of climate which Mr. Hampson contemplated would build up his health and prolong his life. Some of them knew Mr. Hampson had literary and artistic tastes, which he hoped would be a source of great pleasure to him for many long years to come. He was sorry he could not express to the full his own feelings on the subject; but he moved—

That the Council accept with sincere regret the resignation of Mr. Robert Hampson, and desire to place on record the great interest he took in the Society, especially as a member of the Council for twenty-six years and Treasurer for eight years.

Mr. NEWSHOLME said it was with pleasure and regret he seconded the resolution—regret because it was necessary to accept Mr. Hampson's resignation. He was a man who was never really well, and it was only his indomitable pluck which enabled him to do his duty. A severe accident in early life had upset him permanently. The Benevolent Fund was dear to his heart, and, although they did not agree on certain points, they all admired his independence of mind, although they felt his scheme for electing annuitants would not work. Illness often tends to make persons irritable, but in Mr. Hampson's case it seemed to have had a refining influence, and he was sure they were all benefited by associating with him. (Hear, hear.)

Mr. BOTTLE said he could not let this vote pass without making a few remarks, although he could add nothing to what had been said. He (Mr. Bottle) could go back to the period when Mr. Hampson joined them with his friend Mr. Scott Brown. Since Mr. Hampson came amongst them he had always been one of his closest friends, and although they differed much in opinion, they never did in friendship. It was in connection with the admission of women-students to their schools that Mr. Hampson distinguished himself, and although he (Mr. Bottle) was conservative enough to think at the time it

was not in the interests of the Society to do so, still, when they had got the women in the house he could not resist admitting them as members and associates. His hope was that rest and retirement would enable Mr. Hampson to gain strength. (Hear, hear.)

Mr. ATKINS spoke of the loss of his old friend, and said he felt he would be false to his convictions if he did not support the resolution. For his part, he knew that the great charm of his monthly visits to London was the friendships he formed on the Council, the dearest and best of which was with Mr. Hampson. He well remembered the impression Mr. Hampson produced on him. In the earlier days of his Council experience they had longer speeches and elaborate discussions, but it was not perhaps as an orator that Mr. Hampson impressed him, but by the intensity of his convictions. Their personal friendship would now, he was sorry to say, be only by correspondence. The public loss, too, was very serious. Mr. Hampson brought to the Council a mind well stored; he loved art and literature, and several other things outside pharmacy and science, and they all felt the influence of his refined mind. He had been not only a critic, but a constructive worker for the Society. His name for twenty-five years had been connected with all aggressive and progressive measures. Continuing, Mr. Atkins said he heartily endorsed the kind expressions that had been made, and reminded them that, as Mr. Hampson was not an old man, they might still hope for considerable prolongation of his valued life. (Hear, hear.)

The PRESIDENT, in putting the resolution, said the concluding remarks of Mr. Harrison's letter to him were as follows:—"His manly courage, sympathy for the suffering, and loyalty to the Society had obtained for him the love of all."

The resolution was carried.

The President announced that the next business was

ELECTION OF A TREASURER.

This, he said, they would do by ballot in the usual way, and members would place a cross before the name of the member for whom they wished to vote.

Mr. BOTTLE observed that the names of the President and Vice-President were included in the list, and Mr. CARTEIGHE thought it did not matter. If elected, they would then consider what to do.

The box was passed round and each Councillor slipped in his voting-paper; then the Secretary read out the names of those to whom votes had been recorded. The first name read out was that of Mr. Allen; but all the others were Mr. Martindale.

The PRESIDENT rose and said it was his pleasant duty to declare Mr. William Martindale duly elected their Treasurer. He believed Mr. Martindale was sunning himself somewhere in the Mediterranean district. It afforded him great pleasure in having Mr. Martindale associated with him. He takes great interest in all that concerns pharmacy. Even on his pleasure-voyage he has not forgotten us, but has sent us a copy of a new Act dealing with pharmacy regulation in Gibraltar, to which reference would be made in an early number of their *Journal*.

Mr. CARTEIGHE moved that the President be given authority to sign cheques in the absence of their newly-appointed Treasurer abroad. They would find no difficulty in this, as it was the President and Secretary who introduce the Treasurer to the bank. He knew Mr. Hills would not mind a few signatures, seeing that he was presently to sign letters to the whole trade; still he did not want his signature to be too cheap. Mr. Martindale's friends and admirers would feel they have done the right thing in conferring this honour upon him. He (Mr. Carteighe) thought him the typical pharmacist of to-day since Peter Squire's death. He was well educated, active, and loyal to the Society, and they all hoped that a higher office still would before long be conferred upon him. Continuing, Mr. Carteighe said it was a good many years since he first knew him as a fellow-student, when, associated with Umney, there was not a single thing that had been done in that Society with which he had not taken an active part. He was like Richard Reynolds—one who could keep the wavering of the Society strong.

Mr. BOTTLE said they ought to write to Mr. Martindale telling him that the President had been given permission to

sign cheques in his absence, as, if the fact of his election reached him through any other source, he might think it his duty to hurry home, and so spoil his pleasure-trip.

The PRESIDENT suggested that the election of another member of the Council be deferred till next meeting.

RESTORATIONS AND ELECTIONS.

Three names were restored to the register on payment of a fine of one guinea, and nine diplomas of membership stamped with the seal of the Society were granted.

The report of the

FINANCE COMMITTEE

was then read. It showed balances on the

	£	s.	d.
General Fund account	990 2 1
Benevolent Fund account	916 0 3
Donation account	492 18 5
Orphan Fund account	170 16 0

1,514*l.* 4*s.* 11*d.* was submitted for payment, of which 400*l.* odd was for examination expenses, and 516*l.* for the *Journal*.

The PRESIDENT said there was nothing especially calling for attention; the payments were of the usual character. He would like, however, to refer to a donation of five guineas from Mr. Dennis, of Louth, for the Benevolent Fund; it was another proof of the interest of their friends throughout the country.

The Benevolent Fund Committee's report recommended that

GRANTS,

three of 13*l.*, one of 12*l.*, two of 10*l.*, and one of 5*l.* be made.

The resolution was put and carried.

Mr. NEWSHOLME said, before leaving the subject of Benevolence he would like to call the attention of the members to the case of a chemist's daughter who was not eligible for their fund, but who was seeking votes for the Beneficent Association. If there were any of them who had influence he hoped they would use it for this case, which was thoroughly deserving.

Mr. ATKINS said he might add that the grant this lady would get, if successful, was much smaller than their Society gave. The competition for it was enormous. Some years ago his wife took a lot of trouble to get a poor person elected, and after all the effort they found the grant was only 2*l.*; still it was an enormous blessing to the recipient.

LIBRARY COMMITTEE.

The Library, Museum, and House Committee's report dealt with the attendance at the museum and library, and the number of books. The Librarian reported his attendance at the Library Conference at Southport. The report went on to recommend the closing of the library and museum in the evenings from January 1, 1899. The hours of closing suggested were 6 o'clock (on Saturdays 2 o'clock), and on the nights of the evening meetings 8 o'clock. The Dean reported that the school was full, and they were compelled to use part of the Research laboratories to accommodate some of the students, of whom they had now sixty-two. The report recommended that 50*l.* be spent in apparatus needed for the demonstrations, and that Mr. Carteighe be appointed visitor for the session. It also recommended that 750 registers and 900 calendars be ordered for 1899.

Mr. SOUTHALL asked how many Research students they had in the laboratory, as he noticed no mention of them in the report.

The PRESIDENT said they had a Salters' and a Burroughs' scholar at work, but no Redwood scholar, for which they had no application. In reference to the Library and Museum Committee's report they would notice that the library and museum were not being taken advantage of in the evening to the extent they would wish. The attendance had been gradually getting less, due, perhaps, to the fact that now many associations were in existence which attracted their younger friends in the evening. The tendency was to attend more during the day, and, having regard to the long hours of the staff and the expense of lighting and warming, it was, he thought, worth trying the effect of early-closing for a year. In

reference to the school, they did not object to being quite full; it was a good advertisement to be able to say they had no standing-room. The grant of 50*l.* for apparatus was necessary, as some they had at present was out of date, and as their school professed to teach and not to cram, it was desirable that certain experiments should be performed before the students. This committee was much overburdened with work, but when some of the arrears were cleared off they would try and tackle other matters.

The report and recommendations were adopted.

POISONS REGULATIONS.

Dr. SYMES said, in the absence of a report from the Law and Parliamentary Committee, he would like to ask a question. As they might be called on in the coming session to oppose Bills inimical to their interests, would it not put them in a better position if they put their own house in order, and adopted the poison regulations? Ten years ago he brought the subject up, when it was opposed; perhaps now they might think it right to take steps in the matter. He thought they should first set their own house in order, and carry out the regulations which were imposed on them by the 1868 Act. If they adopted those regulations it would give them a greater hope of being listened to when dealing with the questions of stores and poisons.

The PRESIDENT said the Law and Parliamentary Committee had sat and considered one or two important matters which they were not in a position to report on. In reference to the point raised by Dr. Symes, his friends knew what his (the President's) opinion on the matter was. He had reason to believe that his colleagues would be unanimous in adopting the poison regulations. It was open to any thirty members to ask that a special meeting be summoned to consider the matter. Whatever the intentions of the framers of the Act were, it was left to the Society to interpret. At the historic meeting at which the subject was brought up the Council would not submit to the regulations. The conditions were much altered, and he felt it would give them greater weight if they set their own house in order and adopted the regulations which the 1868 Act intended to be passed. (Hear, hear.) Dr. Symes had parenthetically referred to company-trading; it was a subject which it has been suggested should be debated throughout the country. He (the President) would like to ask that his friends should discuss this matter with the greatest deliberation, bearing in mind what was practical and what was impractical. Parliament would not legislate in the interest of pharmacists alone, but only what was best for the public. At a meeting of the Nottingham and Notts Chemists' Association, for instance, a resolution was passed calling on the Society to take early action with a view to preventing companies doing what is illegal for a person to do. From the remarks of one or two of the speakers he judged that it was deemed practicable to prevent stores from carrying on the trade of chemists and druggists. He was not dictatorial, but wished they would discuss the subject in such a way that they could place it before their own M.P.s, and not merely pass abstract resolutions.

Mr. CROSS thought the pharmaceutical press should be asked to take notice of the poison regulations. He felt that if the rank and file of chemists were to read them they would not say they were being bound hand and foot, but would find the regulations were nothing more than were generally adopted. All chemists did not have the Calendar but most of them received either the *Pharmaceutical Journal* or THE CHEMIST AND DRUGGIST.

Mr. SOUTHALL asked if a vote of the Council would render them compulsory, and was informed that a vote of the Society was required.

The report of the General Purpose Committee was then read, and a long list of

LOCAL SECRETARIES

appointed.

The PRESIDENT said there were forty-two places from which no reply or nomination had been received, and he proposed that the filling up of these places be deferred for a month. He called attention with regret to the apathy shown throughout the country; in many districts, it was true, more energy was being displayed, but from forty-two places no nominations and no replies whatever had been received. It

did not necessarily follow that it was due to apathy, but as the years went on he had come to see that many chemists took very little interest in the progress and work of the Society. He suggested that the names of these places be published in their *Journal*, and the matter be deferred till next month to give their friends time to say whether they desired to be represented by a local secretary or not. It was better to have none at all than one who was apathetic.

Mr. ATKINS was glad to hear the President thank the local secretaries, as from his personal knowledge some of them deserved thanks. There were, of course, local secretaries and local secretaries. He noticed one important town in the West which was formerly prominent in pharmacy and from which now no voice came. Still they should bear in mind that some of the constituencies were very small in some places, and consider the advisability of making centres. Then the evil times upon which pharmacy had fallen had a lot to do with the apathy. He knew proprietors of what were formerly prosperous businesses who were simply disheartened by store competition.

Dr. SYMES said they all felt indebted to the local secretaries, who in their time met with many difficulties and successfully overcame them. Mr. Smith, who was a Liverpool local secretary, recently read a paper before the local Society on "Local Secretaries," and at the end of the paper asked to retire. He (Dr. Symes) thought it best for the reader of such an able paper to remain. In another year they would have a larger number to select from, and he fully expected greater interest would be taken in the elections. If they would allow him, he would like to mention some points in Mr. Smith's paper. One was that the voting-papers be sent out a little later, so that local secretaries could discuss the merits of select candidates. Another point of the paper was the suggestion that some official of the Society be sent to each local secretary, to go with him to the local chemists. Mr. Smith also suggested that local secretaries should meet together occasionally, and he (the speaker) thought it would be a good idea to bring them together sometimes for the purpose of discussing their difficulties.

The PRESIDENT said he felt guilty in not thanking the local secretaries as Mr. Atkins said he had. Mr. Atkins had said what he should have said, and he desired to say that the Society were much indebted to the local secretaries for the light they held in dark places. Continuing, the President said he might say in regard to the local secretaries in Scotland they had gladly availed themselves of the services of the local executive, and he might mention that, on their recommendation, they had made Portobello a division, with Mr. John Nesbit as local secretary. Mr. Nesbit was well known to them, and was an Englishman who lives in Scotland—rather an exceptional case, he thought.

The superintendents of written examinations were re-appointed without change.

The SECRETARY read the report of the examinations held in October, and the reading of the large number of failures caused a member to exclaim "Dreadful," and another "Oh!"

It was also recommended that the examiners meet to conduct the oral part of the Major and the Qualifying examinations in January, April, July, and October of 1899, or as near those months as may be.

LETTERS.

Mr. WARD (Sheffield) thanked the Council for their letter of thanks.

Mr. INCE wrote asking the Society's acceptance of his private collection of autograph-prescriptions which he had arranged for class-work. There were 500 of them, and although the collection was but small, he thought it illustrated the different phases of medical practice. The collection had been cleaned and mounted in books. The donor was thanked.

The resolution received from the Chemists' Assistants' Union was a subject of debate as to its meaning. The resolution called the attention of the Society to the dispensing of poisons in doctors' surgeries, and asked them to take steps to stop it. Some members thought it meant open surgeries, and others thought it might refer to a doctor's private dispensing, with which they were not concerned. It was resolved to reply to this effect.

Mr. CAETEIGHE said this union was an illustration that

gentlemen who form themselves into a union should try and find out the existing conditions of things before asking for something to be done which was impracticable. Medical men and apothecaries are exempt from the provisions of the Pharmacy Act, but if they keep open shop they were bound by the same law as chemists, and then must have registered assistants for the sale of poisons.

Mr. RUTHERFORD HILL, Assistant-Secretary in Scotland, wrote expressing the thanks of the Executive to the President for the trouble he had taken to ensure the passing of the Amendment Act, and asked to be advised as to what steps should be taken to increase the membership of the Society.

NORTH BRITISH BRANCH.

A MEETING was held on October 28, Mr. J. L. Ewing presiding.

The ASSISTANT-SECRETARY (Mr. J. R. Hill) having read the report of the General Purposes Committee,

The CHAIRMAN expressed the gratification of the executive that Dr. Stockman had consented to deliver the opening address of the session on "Arrow-poisons." He explained, with reference to the improved ventilation of the laboratory, that a Blackman fan had been introduced as an experiment. It worked efficiently, so far as ventilation was concerned; but, owing to a defect in the fittings, was rather noisy. They had been assured that the defect could readily be remedied. The cost would be about 22*l.* He said they had the prospect of an interesting session, and the committee had concluded to recommend that they continue to hold the meetings on the third Wednesday of each month.

The report was adopted.

THE BOARD OF EXAMINERS.

The executive then went into committee to hear a report with reference to the election of the Board of Examiners. Professor Gibson, Heriot Watt College, having completed his four years' term of office, retired, and his was the only place to be filled up.

The meeting being open, the following resolution was moved by Mr. FISHER (Dunfermline), seconded by Mr. JOHNSTON (Aberdeen), and unanimously adopted:—

That Isaac Bayley Balfour (Regius Professor of Botany in the University of Edinburgh), Leonard Dobbin (Lecturer on Chemical Theory and Assistant to the Professor of Chemistry in the University of Edinburgh), Alex. Davidson (Montrose), James Laird Ewing (Edinburgh), Jas. Jack (Arbroath), George Lunan (Edinburgh), Thos. Maben (Hawick), and John Nesbit (Portobello) be nominated for election by the Council as members of the Board of Examiners for Scotland for the year 1899.

B.P.C. DELEGATES' REPORT.

The CHAIRMAN gave in the reports of the delegates to the B.P.C. at Belfast, and spoke of the success of the meeting, and the hospitable way in which the Conference had been entertained. Mr. CURRIE also spoke in a similar strain.

LOCAL SECRETARIES.

A communication from the SECRETARY was read asking for the nomination of local secretaries in centres which had failed to nominate. The names of certain suitable gentlemen were selected.

THE BENEVOLENT FUND.

The CHAIRMAN reminded the members of the claims of the Benevolent Fund, and mentioned the case of a Scotch chemist who had been completely incapacitated from work, and who had received a grant of 12*l.* a year, and of another who was in receipt of 5*s.* a week.

Mr. JOHNSTON also mentioned cases in Scotland where the grant obtained from the fund had been of great service.

THE PHARMACY ACT AMENDMENT ACT.

Mr. CURRIE said they felt much gratified at the passing of this Act, particularly as it originated with the Executive. No doubt the result was due to the indomitable perseverance and untiring energy of their President, Mr. Walter Hills. (Applause) He thought they should consider at their next meeting what steps should be taken to increase

the membership of the Society. Local secretaries might do a great deal. He had been again nominated for Glasgow, and he intended to accept the nomination, and would do his level best. He moved that it be remitted to the committee to consider what steps should be taken to increase the membership of the Society. This was seconded by Mr. CLAUD HENRY, and adopted.

THE TITLE OF "CHEMIST" AND "DRUGGIST."

Mr. CLAUD HENRY gave notice of the following motion:—

That in the opinion of the Executive steps should be taken to prevent limited liability companies from using and exhibiting the title "chemist," or "druggist," or "chemist and druggist," and that the attention of the Council be called to the increasing use made of such titles by such companies, with the view of their taking action in the matter.

FIRST EXAMINATION.

We have received from the Registrar of the Pharmaceutical Society of Great Britain the following list of persons who were successful at the First examination, held on October 11:—

Anderson, T. L., Prestonkirk	Huggett, Thomas H., Deptford
Archer, Arthur E., Epworth	Ivimey, H. E. W., Southampton
Barber, R., Newcastle-on-Tyne	Johnson, Stanley H., Lincoln
Bately, Alfred E. J. T., Blyth	Johnstone, John, Couthbridge
Belton, John P., Leicester	Jones, Roger Wilfrid, Ruabon
Booth, Mitchell K., Aberdeen	Kilby, Herbert Wilfrid, Luton
Bourne, Thos. P., Horncastle	Lamb, Alexander, Aberdeen
Bradbury, Constance, Ryde	Lewis, John Rees, Fendle
Brierley, Thomas, Oldham	McCowan, Alexander, Comrie
Browning, H. W., Plymouth	McInnes, Angus, Inverness
Burgess, James E., Eccles	McIntosh, Edwin G., Huntly
Carmichael, F. M., Kirkmichael	Maclean, Roderick, Selkirk
Carrington, H. G., Stockport	Martin, John William, Norwich
Casterston, W. C., Market Rasen	Maw, Arthur T., Nutfield
Cheetham, T. H., Sunderland	Mills, James Q., Rochdale
Cherrington, G. E., Newark-on-Trent	Mills, Leonard A., Leicester
Collins, Fredk. R., Cheltenham	Mills, Sydney, Nineatou
Cooper, William J., Leicester	Morley, Cecil J., Nottingham
Cranshaw, Walter W., Bingley	Morris, Ernest M., Kidwelly
Crockart, F. B., Blairgowrie	Morrison, John C., Drem
Daniel, Reginald, Derby	Mowat, John C., Stonehaven
Davis, F. T. S., Teignmouth	Nisbet, Peter, Eyemouth
Deane, Annie M., Cradley Heath	Noltie, Edward T., Forres
Dickinson, E., Penrith	Parkinson, Walter, Southport
Docter, John A., Arbroath	Ransome, Harold R., London
Dodd, Alfred John, Ripley	Reid, Wm. Geo., Invergordon
Drummond, George C., Ayr	Reynolds, Harry, Coleshill
Dwyer, Walter James, London	Richards, P. D., Ogmore Vale
Eynier, Harry, Stafford	Ridley, William John, Carlisle
Falcon, John, Carlisle	Roberts, David, Talsarnau
Fancourt, William, Doncaster	Robinson, John S., Bishop
Farmer, David F., Kirkcaldy	Auckland
Fawcett, J. W., Northallerton	Rowlands, Fredk. J., Old Deer
Finlayson, Chrstr., Inverness	Rumsey, James C. H., Dulwich
Fisher, James, Kinghorn	Russell, James, Paisley
Forrester, A., jun., Glasgow	Sansom, Henry C., Cosham
Forrester, E. M. G., Edinburgh	Sharp, John, Aberdeen
Fox, Clara M., Birmingham	Shepherd, John McL., Dundee
Gabb, Leslie, Birmingham	Shirreffs, Robert, Aberdeen
Gibbins, Richard Ernest, Derby	Smith, Alfred I., Bayswater
Giles, Arthur Alex., Aboyne	Smith, Frederick L., Coventry
Gordon, John, Monkton	Sutton, Jessie A., Birmingham
Greeuwod, Parker A., Preston	Taylor, Robert, Ecclefechan
Hall, John W., Middlesborough	Taylor, William S., Rostrevor
Harper, William, Montrose	Thompson, Edwin, Liverpool
Harrison, Charles, Workington	Thorpe, John Wm., Barnsley
Hart, Herbert S., Birmingham	Tice, Lennox, Great Yarmouth
Hartley, Geo., Market Drayton	Trinder, Chas. G., Cirencester
Haslam, Edward M., Blackpool	Vincent, Caroline, Ryde
Henderson, John Ross, Dollar	Wallis, Gilbert F., Edinburgh
Higgs, Alfred L., Kingston-on-Thames	Watson, John C., Girvan
Hoggs, John Alec, Kingskettle	Watmough, Arthur Chas., Hull
Hogg, William, Selkirk	Wason, E., Seaton Delaval
Holden, Benjamin, Blackburn	Whelch, P. H., Market Rasen
Holt, William, Blackburn	Whitehouse, S. P., Workington
Hooker, Ernest Rich., Brighton	Widdowson, Chas. C., Bulwell
Hothersall, Robert H., Rishton	Williams, Sydney, Llanelli
Howell, Edmund G., Swansea	Wilson, Robert, Liverpool
Hoyle, George Edward, Hull	Winser, F. J., East Grinstead
Huck, John Robert, Darlington	Wood, Lionel G., Northwich
	Wright, Arthur, Barnsley
	Wyness, Alex. S., Aberdeen

Pharmaceutical Society of Ireland.

THE new session of the School of Pharmacy was opened on October 31 at the Society's House, 67 Lower Mount Street. There was a numerous attendance of students and visitors, amongst the latter being the Right Hon. the Lord Mayor, Sir George Daffey, Dr. J. W. Moore (President of the College of Physicians), Dr. Jacob, and Mr. Swan (President of the College of Surgeons). Mr. Field, M.P., wrote to express regret that he could not be present.

The chair was taken by the President of the Society, Mr. R. J. Downes.

The Registrar read a letter from the father of Mr. A. C. Ross, to whom the gold medal for the best answering at the Licence examination had been awarded, but who was unable, through illness, to be present, acknowledging the receipt of the medal, and expressing thanks for the good wishes of the Council for his son's recovery.

Mr. Matthew Campbell, to whom the silver medal had been awarded as the next best answerer, also wrote apologising for not being able to attend.

PROFESSOR TICHBORNE ON THE PHARMACOPEIA.

The PRESIDENT, in introducing the subject of the evening, expressed his satisfaction at seeing the medical profession so well represented. The lecturer was one of the builders of the Pharmacopœia, and there was no one more competent or the work than Professor Tichborne. It was also appropriate that the Lord Mayor, as representing the citizens who consumed medicines, should be with them. They, the members of the Society, were only the rank-and-file, whose duty was to obey and endeavour to perform the functions allotted to them.

Professor TICHBORNE then delivered the following address :—

THE BRITISH PHARMACOPEIA, 1898.

By Charles R. Tichborne, L. & Dip. P.H., R.C.S.I. and A.H.I., F.I.C., &c., &c.

The Pharmacopœia is never a popular book. The prescriber may look upon it in a favourable light, because of its use to him in his profession, but even he revolts against it occasionally because of its doses. The compounding looks on it simply as a kind of strait-jacket, confining his views, ideas, and perhaps, his profits. But the medical student is a true hater of the Pharmacopœia. To him it appears as a hard task-master, which he is compelled to follow, at least, to a limited and superficial extent. He does not hate his "Gray's Anatomy," or his "Charteris's Practice Medicine," because he looks upon them as his friends who are to help him when he meets that well-known classic wedge whose name shall be mentionless. The Pharmacopœia is a hard condensed book of facts, and at an examination is equal to any two as regards the memory required.

Perhaps it is from this cause that no book with which I am acquainted is so drastically criticised as each edition appears. In the Pharmacopœia of 1885, it was no doubt served. That edition was unquestionably open to animadversion in many respects, but that of 1898 shows a different front, and I may say that the criticisms so far amount to very little. They may be divided into (1) criticisms on errors discovered, (2) criticisms of divergence of opinion, and (3) hypercriticisms. The first should be carefully noted for further editions, and the last may be ignored. As regards the second, they should all be weighed in the balance for future guidance. To show how all these criticisms may be taken *cum grano salis*, I have a journal before me in which, almost, we may say, on the same page, one gentleman severely condemns, whilst another praises, the same preparation.

I think it must have been gratifying to the makers of the new Pharmacopœia to have seen the results of the British Pharmaceutical Conference which was this year held at Belfast. As might be naturally imagined, it largely engaged the time of that Conference, and a great number of speakers engaged upon it. The speeches were more of the nature of expositions than criticisms, and the latter amount to hardly anything. The book had been in the hands of the profession

for two or three months, which gave ample time for its consideration, and which, I am sure, had been given to it in many cases from a hypercritical standpoint.

To deal with all the changes in detail would be too serious an undertaking for one lecture, but I cannot do better than recommend the excellent articles published in connection with this part of my subject by Professor Leech, which have appeared in nearly all the medical and pharmaceutical journals, and are now published in pamphlet form by J. Heywood, Deansgate, Manchester. At any rate, you will find them in the *Medical Chronicle* of April and May. He therein gives the reasons for at least most of the changes introduced, and you may judge for yourselves of their merit. Than Dr. Leech you could have no better authority. He took a very active part on the Pharmacopœia Committee from the inception of the work, I think some two years before I went on myself, and therefore knows the ideas which guided that body from the commencement.

Do not think for one moment that I wish to lay it down that the present Pharmacopœia is a perfect book. The very nature of its construction prohibits this from being so. It is intended to meet the views of the majority of the profession, and the minority must feel disappointed. I will let you into a professional secret. On more than one occasion the individual members of the committee were not in accord, but I think we were all agreed to give and take, and try and profit by the preponderance of experience, to which we attached special value. We did not go in for any of our special crotchettes. We hope the critics will act in the same spirit. It was a question of preparing an up-to-date work, and I think this has been done. Dr. Attfield informs me that up to the end of last month the amount of *errata* to hand was *nil*. This is certainly gratifying—in fact, too good to last—but I do believe that no work of such varied scope will contain so few mistakes. It says a good deal for all engaged in it, and volumes for the editor.

To enumerate all the changes that have taken place would be simply to recapitulate Dr. Leech's articles, and could not be condensed into one discourse. My lecture this evening, therefore, will be divided into two parts. The first will be devoted to the chief principles adopted in the construction of the work; and I will devote the second part to detailing a few special points of interest, and which are not explained in the current literature at our disposal.

OMISSIONS AND ADDITIONS.

In considering the construction of the new book, the first question was what to put in and what to leave out. As regards the omissions, it must be remembered that the committee are not really answerable for them; they were practically determined by a plebiscite of the practitioners. In other words, all who chose to vote in the British Medical Association sent in their votes as to what should be retained. The same thing applied to the Licensing Boards, and even the Pharmaceutical Society of Great Britain was asked to prepare tables showing the frequency in which drugs appeared in prescriptions. For some unaccountable reason, at the early stage of the proceedings, the Pharmaceutical Society of Ireland was left out. I was not at that time on the committee, or I should certainly have moved that their advice be taken upon this particular point, as they would largely voice the custom as regards Irish practice. The additions were almost always added when the use of any particular drug or preparation had become established. Perhaps it is to be regretted that effervescent soda, lithia, and potash waters are omitted. One cause was the unpalatability of the old preparations, the soda being much too strong. It is true that they are extensively used as beverages, but they are much more extensively used as remedial agents, and from that point of view the amount of alkali should be defined. I am afraid we shall in future get very little lithia in our lithia water, and we must trust to a standard being determined under the future Adulteration Acts.

A subtle omission comes in here which may easily escape observation—*aqua* no longer appears. Of course, this means that nothing but distilled water is to be used. This will hardly be carried out in practice, but certainly the manipulator should use a very nice discretion if he employs ordinary water. Presuming he has a good supply, there is no reason why he should not use it in certain processes, in washing-products, or where distillation occurs. The tests for the

purity of distilled water are now very stringent, but carbonic-acid gas is omitted. It is just possible that this might be present, and, if so, it will be found to affect the Goulard's solution and some other preparations.

THE ALCOHOLS IN THE PHARMACOPEIA.

Here we have a very considerable departure from previous usage. Alcohol in the tinctures, and, indeed, throughout the Pharmacopœia, may be said to be used either as a solvent or as a preservative, not as a medicine *per se*. Thus in tr. myrrh. strong alcohol is used, because the resin of the myrrh would not be soluble in a weaker spirit. In the liquid extract of cascara, we have it used as a preservative. The tendency of modern research would show that when used as a solvent, the old rectified spirit—55° over proof, as the Excise term it—and proof spirit having a strength of 57 per cent. of alcohol by volume, were not the best strengths to work refined pharmacy with. Therefore, there are now six alcohols, or six strengths of alcohol, properly speaking, used in the B.P.:—

	Sp. Gr.	B.P., 1885.
Alcohol absolutum (99·4%)		
Alcohol 90% ...	... 834	Sp. rect., 88·65%, sp. gr.
Alcohol 70% ...	... 890	838.
Alcohol 60% ...	... 913	Sp. tenuior., 57%, sp. gr.
Alcohol 45% ...	... 943	920.
Alcohol 20% ...	... 976	

Alcohol 90 per-cent. now represents the old rectified spirit, and alcohol 60 per cent. the old proof. As regards the tinctures, where the active principle is purely resinous 90-per-cent. is used; where it is partly resin, with other principles soluble in water, 70-per-cent. is used. Where a liquid extract, standardised, is mixed with alcohol, 70-per-cent., and even 90-per-cent., is used, which brings the resulting tincture nearly to the old standard as regards alcoholic strength. Where the drug contains a considerable quantity of essential oils, 70-per-cent. is used—cubebes, lavender, &c., are even made with 90-per-cent. This results, taking them all round, in making the tinctures more expensive.

STANDARDISING PREPARATIONS.

In connection with the subject of tinctures I will pass to the consideration of the estimation of the alkaloids in the most active and important preparations used for internal administration. This has been carried out in the new book as far as was considered judicious, and we find a considerable development in this direction for the preparations of cinchona, belladonna, nux vomica, opium, and morphia. The processes, although long and apparently complicated, are more in the sphere of a manufacturer's requirements, but still should present no difficulty to the fairly-educated pharmacist, if practically trained, like our own students. The processes being minutely described, it is only necessary to keep your heads clear and follow the directions. Failure will generally arise from want of training in manipulation; and here let me give a word of warning to the student. The ordinary student has the passing of his examination so vividly on his mind that he works in too great a hurry, and chafes a little at the admonitions of his teachers because they seem to attach too great weight to details. When he comes to the quantitative work, however, every little looseness in manipulation tells against his results. In his laboratory-work he does not see the importance of pouring from one vessel to another, carefully down a rod, and that if he is pouring on to a filter it is necessary that the rod should guide the fluid gently on to the edge of his filter. He would prefer expediting matters by dashing the liquid or even dropping it on to the centre of the filter on the principle of a cataract. Such a system of working would utterly ruin such a process as the standardising of opium preparations. If his teacher objects to his using his crucible in place of his evaporating-basin, or to the angle at which he holds his test-tube, he smiles inwardly at the supposed pedantry, and thinks he only paid his money for the purpose of gaining his licence, and does not care whether he comes out a good or a bad manipulator at the end of his six months' training. A good examiner should award marks for good manipulation. The training that a student gets in neat and careful manipulation will cling to him in after-life, and will tell in all directions in his career. Show me a man at

work for his examination, and I will tell you at once if he has been trained, without seeing his results.

REGULATION OF THE B.P. DOSES.

One of the most important changes in the new Pharmacopœia has been the attempt to regulate the doses so that all the preparations shall be in harmony with known doses of the active ingredients, and also that, as far as possible, they shall be similar in such preparations, let us say, as the tinctures. Thus in this latter class of preparations they may be divided into two classes—the very active ones having a range of 5 to 15 minims, the others from $\frac{1}{2}$ to 1 dr. To effect this, great changes had to be made in some of the strengths. It is hardly correct to speak of the doses given as "average" doses—they are average ranges. Extreme doses are ignored, either as regard minute or large ones. This regulation of the doses must indubitably bring about a certain amount of danger for a short time. Of course it will be said that that is a question that concerns the prescriber, but yet the compounder must be prepared to act as a check on this important point. Thus the hypodermic solution of morphia is half the strength of the old Pharmacopœia. Here the prescriber, if he were working from the old figures running in his mind, would be giving only half what he intended. Similarly, most of the active preparations are weaker, but not all. Thus, ergot infusion is double the strength, so that a prescription might easily be presented to the compounding containing double the dose intended by the prescriber. The pill of that very poisonous drug phosphorus is now double the strength.

I subjoin a list of preparations which I should recommend the compounding to devote special attention to when he comes across them in his practice:—

Spiritus cajuputi ...	... Five times the strength
Lamellæ cocaineæ ...	... Four "
Tr. chlorof. et morph. co. ...	Four "

(This preparation might easily lead to mischief.)

Decoctum granati cor. ...	Twice the strength
Infusum ergote ...	Twice "
Tr. lobelia æthereal. ...	Twice "
Tr. nucis vomicae ...	Twice "
Liquor epispasticus ...	Twice "
Mistura sennæ co....	Twice "
Pil. phosphori ...	Twice "
Tr. colchici seminum ...	Twice "
Tr. conii ...	Twice "
Inject. morphinæ ...	Half-strength
Suppos. morphinæ...	Half-strength
Tr. strophanthi ...	Half-strength
Pil. saponis co. ...	One-sixth stronger in opium

I recommend the compounding, as well as the student, to commit the doses of these sixteen preparations carefully to memory. In connection with the subject of doses, for the first time, we find that a distinction is sometimes made between single doses and doses for continued administration. A little book to carry in the pocket for this work is desirable, and I recommend, as one of the best arranged for this purpose, Wippell Gadd's "Synopsis." It is $4\frac{1}{2}$ inches by $2\frac{1}{2}$, and is as full of condensed matter as an egg.

METRIC SYSTEM.

The decimal system has been introduced as far as it could be with safety, and the scientific or analytical portion is entirely worked upon the metric system. In the part devoted to prescriptions and compounding it would not have been desirable or practicable to introduce it as long as the old weights were still used in prescription-writing. I have to acknowledge that in some few places the anxiety to divide everything into decimal fractions has created unnecessary confusion. Thus I cannot help thinking that the making of the "concentrated solutions"—i.e., concentrated infusions—ten times the strength instead of eight times is not a practical move so long as the fluid drachm, or $\frac{1}{8}$ part of 1 oz., is used in prescription-writing. The concentrated preparation should have corresponded to this, so that the number of drachms used would coincide with the ounces prescribed in the mixture. On the appearance of the 1885 Pharmacopœia I wrote an article animadverting upon the metric system adopted in that book. It raised the ire and antagonistic

criticisms of Professor Redwood and others, but I am glad to see that most of the points I then objected to have been changed in 1893. It is perhaps a pity that gravities are not taken at 62° F., the standard temperature of weights and measures, but this is a small matter. Error is, however, done away with, because we are directed to make up all measures at 60° F., and the testing-apparatus is also graduated at 60° F. It must not be forgotten that the cubic centimetre used in the body of the work is not the true cubic centimetre of the Continent.

FORMULE IN THE NEW B.P.

One of the first things to strike the student of the new B.P. is the change which has been introduced in expressing the formulae of organic compounds. Thus, acetic ether, which in the old B.P. was expressed by $C_2H_5C_2H_3O_2$, now is written $CH_3COO(C_2H_5)$. The reason is that constitutional formulae are employed, which, as well as showing the absolute numbers of atoms of each element combined to form the molecule, express, to the best of our knowledge, the structure of the compound by showing the groups of well-defined radicles which, by their union, make up the molecule, and can be replaced or substituted by other elements or radicles to form new compounds. Thus the empirical formula for acetic acid, $H.C_2H_3O_2$, merely tells that in every acetate we will find $C_2H_3O_2$, but the constitutional formula, $CH_3CO.OH$, conveys that acetic acid contains the radicle CH_3 (methyl) which may be eliminated from it or from which it may be prepared. It also shows acetic acid to contain the carboxyl group $CO.OH$, which again is divided into carbonyl CO and hydroxyl OH , which is present in all organic acids. More facts can also be deduced from it, but the time is too limited to enter upon this subject now. This is the general principle upon which organic formulae are now written. Unfortunately this analogy ceases when we come to inorganic acids.

ELIMINATION OF CHEMICAL PROCESSES.

What had the numerous chemical processes with which the old Pharmacopoeia was loaded to do with the practice of medicine? With a few exceptions (which have been left in from obvious reasons) they have all gone. The prescriber, omnipotent, and student will all be equally thankful. These are some of the most important principles adopted in the new book, and I venture to think they are all moves in the right direction.

I will now deal with a few points of special interest.

Tests for Codeine.—In the old Pharmacopoeia we were told that the alkaloid, dissolved in sulphuric acid and gently warmed with molybdate of ammonia, or perchloride of iron, assumed a deep-blue colour. Now, my experience was that warming it occasionally gave a blue, more frequently anky-black, having the appearance of char. This all depends on the relative amounts of codeine, sulphuric acid, and heat. In fact, the black is not char, the difference of the blue or black depending upon the state of hydration. This curiously shown also by touching the black mass with a drop of dilute nitric acid, when it is instantly replaced by a scarlet, becoming orange, and ultimately pale yellow. This is so given now in the Pharmacopoeia, but a really good test to distinguish it from morphine is still wanted for cocaine.

Purity of Citric Acid.—The question of the purity of citric and tartaric acid—viz., the purity of both as regards acid, and the adulteration of citric with tartaric acid (which is a question of money)—is of immense importance. We hardly realise how these two substances have become associated with articles of daily beverage. The mineral-water trade, as it is called, or more correctly the aerated-beverage trade, has grown to gigantic proportions, and it is gradually becoming the opponent of the brewer. I have an estimate from a friend who can speak with good practical knowledge of the subject, and he puts down the annual production of mineral waters in Dublin as 30,000,000 bottles. If that be so, the make in London must be about 300,000,000 bottles annually.

Now, will you be surprised to learn that until lately there was hardly a sample of citric or tartaric acids which were used for the making of these beverages which was contaminated with lead—a most objectionable and

insidious poison, cumulative in action when taken in small quantity, and producing toxic effects of the most harmful kind? Now, I can show you citric acid in which you can see pieces of lead embedded in the crystals of the acid. In older days, this acid used to be crystallised in leaden pans for the sake of economy. Now most of the English manufacturers crystallise in earthenware, but there is still acid which comes into these countries and is largely contaminated with lead. Everything should be done to put down the use of such substances. Some time ago I got some samples of citric acid, upon which I was trying the molybdate of ammonia and hydrogen peroxide test. It is a very delicate test for the detection of tartaric acid in citric acids, because on the application of the heat of a water-bath a beautiful blue colour is produced. You can detect as small a quantity as 1 per cent. of tartaric acid in citric acid, but on trying it carefully on citric acid which was vouchsafed to me as absolutely pure, I found that it gave traces of the blue reaction, and I incidentally discovered that it was due to the presence of a trace of lead. You will find these observations embodied in the Pharmacopoeia. The production of the colouration renders it necessary to examine for both.

The importance of the question of the purity of citric and tartaric acids has been well cared for in the new book.

The analytical part and the purity of drugs have been well looked after, and in some cases perhaps too well, because many manufacturers say that it will be impossible to arrive at some of the standards of purity specified. This is a good fault, but as it is extensively used as the book of reference when a case is tried under the Food and Drug Adulteration Acts, we must only trust to the good sense and discrimination of the analyst.

LIME-WATER AND GREGORY'S POWDER.

There are two pharmacopeial preparations which are creating a considerable amount of interest just now—lime-water and compound rhubarb-powder. Many prosecutions and fines have lately been inflicted in connection with these articles. Lime-water, or liquor calcis, as it is now called, is merely water saturated with hydrate of lime. This last is only sparingly soluble in water at ordinary temperature to the extent of about $\frac{1}{2}$ gr. of lime to the oz. Now, as this small solubility is only permanent at a given temperature, and as the carbonic acid of the air every time the bottle is opened precipitates out some of this lime, it is a very difficult preparation to keep even in fair order. It requires some little attention, and it is certainly annoying to get into trouble through so simple a thing. Lime-water in a perfectly closed vessel will lose strength in time, particularly if left undisturbed. This may be due in many cases to the lime acting on the glass of the vessel, but it is also due to the fact that lime is much more soluble in cold water than in hot water. This fact was recorded, as far back as 1810, by Dalton. I believe I was the first to account for this phenomenon in a report on "Molecular Dissociation," read at the Royal Irish Academy in 1871, the theory being that the heat dissociates the water of hydration, and the soluble CaH_2O_2 becomes gradually converted into the insoluble CaO . I proved this by heating lime-water under pressure, so as to get a high temperature, the lime being practically thrown out of solution. Thus, the Pharmacopoeia says lime is soluble 1 in 1,000. That is so at 15° C. (normal temperature), but at 109° C. I found 1 part was only present in 1,780, so that we lose about a hundredth part of lime for every 5° of temperature. Now it is curious to observe that in a warm place lime-water deposits a certain amount of lime which it does not seem able to pick up again in the cold night; and we find lime-water will lose strength in time in a hermetically-closed vessel. The wholesale man should never stock his lime-water. If his customer asks for it he should say that he does not stock it, but he should send an equivalent quantity of lime hydrate for the pharmaceutical chemist to make it. The latter should then make his own lime-water in such a bottle as I show you. Now I shall venture to advise him to disobey the directions of the Pharmacopoeia. We are told to shake a gallon of water with 2 oz of calcium hydroxide, and after standing twelve hours to syphon off for use. Now the bottle which I show you is provided with a good cork fortified with wax, and through its centre a capillary-syphon, provided

at the end with a rubber plug. Use a good excess of lime, say, an inch at the bottom, and leave your lime-water on it. Shake the bottle round once a week at night, and you will always have a perfect supply of lime-water through the siphon by removing the plug.

Other interesting cases are the prosecutions which are going on as regards pulv. rheo co. This well-known medicine, familiar to the public as Gregory's powder, is a mixture of 2 parts rhubarb, 6 parts calcined magnesia, and 1 part of ginger. Now it is alleged that magnesium carbonate is substituted for the calcined magnesia—a substitution of a magnesia salt worth 10*d.* for one worth 1*s. 6d.*—but if this is done so as to cheat the analyst, it would be necessary for the dealer to use 10½ parts of the carbonate for every 6 of calcined magnesia, and there is thus no money gained. Unfortunately, however, calcined magnesia absorbs carbonic acid from the air, and again the pharmacist must use every care to preserve his drugs in a good condition. An analyst should not condemn a sample without estimating the amount of carbonic acid and magnesia present, and drawing his inference therefrom.

In conclusion, I may say that the book so far has stood criticism well. Great changes are not desirable in a Pharmacopœia, and those which have been made are on the lines of necessity or improvements. Professor Stoeder, of Amsterdam, has published an elaborate analysis of the work from a foreigner's point of view, and makes really some good points, but it may all be summed up in his concluding remark. He says, "In short, this Pharmacopœia of 1898 cannot escape the reproach that it has considered the interests of the practitioner too much, and those of modern science too little, in virtue of which it loses that strictly methodical character which ought not to be wanting in such a standard book in these days." Quite so; the Pharmacopœia was written in the interest of, and for, the practitioner, and if it has achieved this well, that is its whole function.

Dr. J. W. MOORE (President of the College of Physicians of Ireland) moved a hearty vote of thanks to the lecturer for his admirable and learned address. Professor Tichborne had succeeded within short limits in conveying an enormous amount of valuable information relating to the new Pharmacopœia. It had fallen to his (Dr. Moore's) lot to refer to the pages of that book, and he had no hesitation in saying that it displayed a considerable advance in accuracy and science on its predecessor. Some very radical alterations had been made, but he was certain that in a very short time they would become accustomed to these. It was desirable, however, that "1898" should be appended to any formula which the prescriber took from the recent book. As a practical physician he thoroughly concurred in the arrangement of the tinctures into weak, strong, and average. Hardly emphasis enough had been laid on the subject of the water prescribed for use. The Nanny water, with which Dublin was supplied, was almost indistinguishable from distilled water on account of its purity, and on account of the admirable way in which it was filtered. For these reasons they had been in the habit of using it as if it were distilled. But it was possible for compounders passing from Dublin to other parts of the country to get into the habit of using undistilled water which was of not at all the same standard of purity.

The motion was seconded by Mr. ROBERT SWAN (President of the College of Surgeons of Ireland), and supported by Dr. WALTER SMITH, who strongly urged the advantage of the metric system.

The motion passed by acclamation, and Professor TICHBORNE briefly responded.

The PRESIDENT then explained what had been decided as to this year's gold and silver medals—already reported—and requested the Lord Mayor to hand the silver medal to the gentleman whom Mr. Mathew Campbell, to whom it had been awarded, had deputed to receive it for him.

THE LORD MAYOR OF DUBLIN returned thanks for the honour of being invited to be present on that occasion. His Lordship congratulated the Pharmaceutical Society and also the medical and surgical professions on the progress they had made, and then handed the medal to Mr. Campbell's deputy.

THE VICE-PRESIDENT of the Society (Mr. Beggs) moved a vote of thanks to the Lord Mayor for his kind attendance. This was seconded by Mr. P. KELLY, and acknowledged by the LORD MAYOR.

Trade Notes.

MESSRS. TIDMAN & SON (LIMITED), Bushell Street, E., inform us that they are willing to give chemists advertisements for their price-lists, almanacs, &c., under certain conditions.

MESSES. F. SCHUTZE & CO., whose premises at 36A Aldersgate Street were destroyed on October 22, have obtained a new establishment at 89 Southwark Street, where they have an entirely new stock.

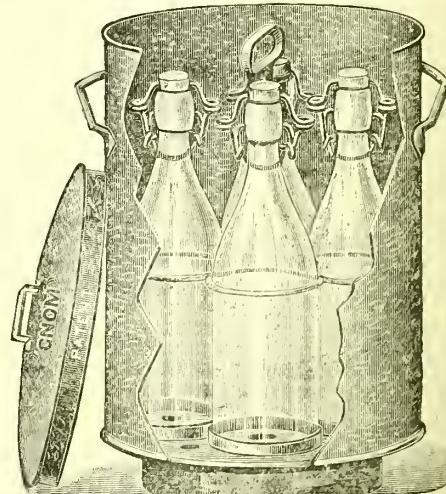
A NEW SIZE of "Frog in your Throat" comes to us; it is 1*s. 1½d.*, and may be sold at 1*s.* Mr. Garratt sends us a long statement about his new advertising-schemes, which we think is good enough to make known to the trade by advertisement in its royal magazine—the *C. & D.*

MR. JOHN MORGAN RICHARDS, of 46 Holborn Viaduct, E.C., the European representative of the Emerson Drug Company, announces that he is withdrawing the 7½*d.* size of Bromo-Seltzer from the home market and is offering the same to chemists on certain conditions as free samples.

MR WM. POPPELREUTER, 54 Portland Street, Manchester, has issued the October number of Heinrich Haensel's report on essential oils. It is an especially interesting one, and contains a number of new scientific facts besides good commercial information. We especially note observations on chrysanthemum oil, lemon oil, linaloe oil, parsley oils (light and heavy), petitgrain oil, and water-fennel oil, which essential-oil students should add to their note-books. Copies may be obtained from Mr. Poppelreuter while they are available.

CURIC WAFERS.—The Curic Company, Leadenhall House, E.C., are introducing a headache, toothache, and neuralgia cure in the form of cachet-wafers. We say "introducing," but as a matter of fact the wafers have been quietly creating a business since 1893, and the makers now propose to make more of it by distributing the wafers through the trade at large. As inducements they emphasise these two points: (1) Curic wafers are a true pharmaceutical article, put up in good style by chemists for chemists, and (2) the speciality is P.A.T.A.ed at full face-value 1*s. 1½d.* per box—or 1*s. 6d.* if the wafers are sold singly.

THE "GNOM" MILK STERILISER.—MESSRS. L. Lomley & CO., of 1 America Square, Minories, E.C., have introduced the new milk steriliser figured herewith; and from this it will be seen that the principle upon which the apparatus is constructed is sound, the sterilising-vessel being a metal kettle



into which is fitted a cruet to hold from four to ten ½-pint bottles, or four or eight quart bottles. These are filled with milk, the stoppers closed down, and the cruet placed in the kettle, into which water is then poured up to within 1 inch of the neck. It is brought to the boil, and kept boiling for ten minutes, which suffices to sterilise the milk. Chemists, especially in provincial towns, should push milk-sterilisers, and this is a good one. The retail prices vary from 12*s. 6d.* to 30*s.*

Trade-Marks Applied for.

Any one who objects to the registration of a trade-mark must address the Comptroller-General, Patent Office, Chancery Lane, W.C., within a month of the date of publication.

(From the "Trade Marks Journal," October 26, 1898.)

Device and wording "Beetle Brand"; the word "BEETLE"; for chemicals. By the British Cyanides Company (Limited), Oldbury, manufacturers and merchants. 215,711, 215,712, 215,713, 215,714, and 215,716.

Design; for glues and gelatins. By E. A. Ruch, Paris, chemical-merchant. 216,613.

"GUFOSSOL"; for a chemical substance for use in medicine and pharmacy. By La Société Chimique des Usines du Rhône, Lyons, manufacturers. 216,641.

Label containing combination of devices (the essential particular); for compounds of meat-juice and glycerin. Design, consisting of two labels and wording; for meat-juice. By Valentine's Meat-juice Company, State of Virginia, U.S.A., meat-juice manufacturers. 210,838, 215,890.

Picture of spray dashing on a rock; for a hair-wash. By W. Lysaght, Liverpool, accountant. 215,205.

"TORPEDO"; for perfumery and toilet-articles. By H. Mack, Ulm a/D and Illertissen a/B, Germany. 216,077.

Combination of devices (the essential particular); for hair-preparations. By A. Horsfield, Accrington, hair-specialist. 216,471.

Design of two polcaxes, and wording "Poleaxe Brand"; for perfumery and toilet-articles. By J. Crosfield & Sons, Warrington, soap-manufacturers. 217,098.

(From the "Trade Marks Journal," November 2, 1898.)

Device (the essential particular) and wording "Cascarets"; for a medicine for human use. By the Sterling Remedy Company, Chicago, New York, and Montreal. 214,521.

"VOCEGLYNE"; for patent medicine for the prevention and cure of hoarseness and like ailments. By Price's Patent Candle Company (Limited), 31 Threadneedle Street, E.C. 216,919.

"LADYBIRD"; for medicated soap and medicated-soap compounds. By T. Hedley & Co. (Limited), Newcastle-on-Tyne, soap-manufacturers. 217,372.

Facsimile signature: for a liniment. By W. H. Beckwith, Stratford, E., farrier. 217,759.

Combination of devices (the essential particular) and wording "Dr. Warlomont's calf-vaccine"; for vaccine. By Markt Brothers & Company, Barbican, E.C., importers. 212,632.

Combination of devices and the words "Les Deux Arlesiennes" (the essential particulars); for olive oil. By A. Escoffier, 7 Pall Mall, S.W., chef. 214,690.

Combination of devices (the essential particular), consisting of silhouette of lady and a puff with wording "Papier poudré"; for a face-powder. By Annie Sarah Butler, 23 Somerset Street, W., vendor of toilet-preparations. 215,848.

Design of label with facsimile signature: for a plate-powder. By T. H. Crease, 93 Cambridge Street, S.W. 216,863.

New Books.

Any book named in this list can be supplied post-free to any part of the world on receipt of the published price by the Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

Beddoes, F. *First Stage Inorganic Chemistry (Practical) for the Elementary Examination of the Science and Art Department.* Pp. 1/4 1s. (Clive.)

Cohn, Dr. L. *Chemistry in Daily Life: Popular Lectures.* 2nd ed. 7 $\frac{1}{2}$ x 4 $\frac{1}{2}$. Pp. 348. 5s. (Grevel.)

Dibdin, W. J. *The Purification of Sewage and Water.* 2nd ed. 9 $\frac{1}{2}$ x 5 $\frac{1}{2}$. Pp. 292. 2s. net. (Sanitary Publishing Company.)

Eissler, M. *The Cyanide-process for the Extraction of Gold.* 2nd ed. 8 x 5 $\frac{1}{2}$. Pp. 153. 7s. 6d. (Lockwood.)

Hare, F. E. *The Cold-bath Treatment of Typhoid Fever: the Experience of a consecutive Series of 1,902 Cases treated at the Brisbane Hospital.* Illus. 8vo. 9 $\frac{1}{2}$ x 5 $\frac{1}{2}$. Pp. 208. 6s. net. (Macmillan.)

Hartridge, G. *Refraction of the Eye.* 9th ed. With 104 Illustrations, Test-types, &c. Pp. 263. Crown 8vo. 6s. Churchill.)

Hüppé, F. *On the Principles of Bacteriology.* 28 woodcuts Cr. 8vo. 7s. 6d. (Kegan Paul.)

Illustrated Annual of Microscopy. 9 $\frac{1}{2}$ x 6 $\frac{1}{2}$. Pp. 164. 2s. 6d. net. (Lund.)

Jessop, W. H. H. *Manual of Ophthalmic Surgery and Medicine.* 7 $\frac{1}{2}$ x 4 $\frac{1}{2}$. Pp. 484. 9s. 6d. (Churchill.)

Jones, C. *An Intro. to Science and Practice of Qualitative Chemical Analysis.* 7 $\frac{1}{2}$ x 4 $\frac{1}{2}$. Pp. 222. 6s. (Macmillan.)

Lodge, O. J. *Signalling across Space without Wires: being a Description of the Work of Herzen and his Successors.* 2nd issue. 8 $\frac{1}{2}$ x 5 $\frac{1}{2}$. Pp. 74. 2s. 6d. net. (Electrician Company.)

Lummer, O., Pringsheim, E. *Determination of the Ratio (K) of the Specific Heats at Constant Pressure and at Constant Volume for Air, Oxygen, Carbon-dioxide, and Hydrogen.* Plate. 4to. Pp. 29. Sewed. 2s. 6d. (Wesley.)

Playfair, W. S. *A Treatise on the Science and Practice of Midwifery.* 2 vols. 9th ed. 8vo. 9 x 5 $\frac{1}{2}$. Pp. 934. 28s. (Smith & Elder.)

Poland, J. *Skiagraphic Atlas, showing the Development of the Bones of the Wrist and Hand.* Roy. 8vo. 5s. (Smith & E.)

Pollack, B. *Methods of Staining the Nervous System.* Trans. from 2nd German ed. by W. R. Jack. Cr. 8vo. 4s. net. (Whittaker.)

Science Chemistry Papers: being the Questions set at the Intermediate Science and Preliminary Scientific Examination of the University of London, from 1890 to 1898. Cr. 8vo. Pp. 72. Sewed. 2s. 6d. (Clive.)

Spencer, H. *The Principles of Biology.* Vol. I. Rev. and enl. ed. 8 $\frac{1}{2}$ x 5 $\frac{1}{2}$. Pp. 718. 18s. (Williams & N.)

Stöhr, P. *Text-book of Histology, including Microscopic Technic.* Translated by Dr. Billstein. Royal 8vo. 14s. (Churchill.)

Woodward, C. J. *Arithmetical Chemistry.* Part 1. New ed. re-written. 7 $\frac{1}{2}$ x 4 $\frac{1}{2}$. Pp. 130. 2s. 6d. (Simpkin.)

Marriages.

BAGNALL—HARDY.—On November 3, at Stalybridge, by the Rev. T. M. Oldfield, M.A., Percy Bagnall, chemist and druggist, to Eva Storrs, eldest daughter of R. Hardy, Stalybridge.

EVELEIGH—GWILLIAM.—On October 25, at St. Paul's Church, Bedminster, B. C. Eveleigh (representative in South Wales and West) and England of Messrs. Evans, Gadd & Co., of Bristol), to Elizabeth, eldest daughter of O. Gwilliam, of Bristol. (Corrected notice.)

LOVE—GARDEN.—On October 15, at St. Mary's, Prittlewell, by the Rev. Thomas O. Reay, vicar, Henry Franklin Love, of 41 Bishop-gate Street Within, E.C., to Catherine, eldest daughter of the late Mr. John Garden, of 3 Lothbury, London, and Tottenham.

ROWE—REDGRAVE.—At St. John's, Cape Town, by special licence, on October 4, Thomas Rowe, a member of Messrs. P. J. Petersen & Co.'s Cape Town staff, to Sarah (Sadi). second daughter of Mr. James Redgrave, Coventry, (England.)

Death.

HARRISON.—In London, on October 20, Mr. E. M. Harrison, of Widnes. Aged 36. Mr. Harrison served his apprenticeship with Messrs. Tate & Co., analytical chemists, Liverpool, and was for some time manager for Messrs. Hay, Gordon & Co., chemical-manufacturers, Widnes. He afterwards transferred his services to the United Alkali Company, and was appointed a department-manager at Garston, a position he held up to the time of his death.

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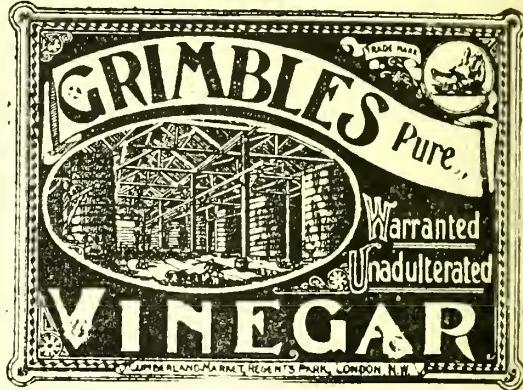
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Editorial Comments.

Pharmacopœia Criticism.

THE announcement that Professor Ramsay is to lecture to the Pharmaceutical Society next week on the new gases of the atmosphere indicates that the Society is not to make the British Pharmacopœia the subject of a field-night at Bloomsbury, as has been the custom hitherto when new Pharmacopœias have been published. This is not surprising. The first B.P. was severely criticised by the Society's professors, and when one of them was appointed an editor of the 1867 edition the professoriate was silent about that work, and the rank-and-file had to take it up. The same thing occurred with the 1885 edition. Now that the rank-and-file have been represented in the revision, there is no one left to lead off criticism. That is fair inference, but it is not, we believe, the fact. Meanwhile the Pharmaceutical Society of Ireland has made a start. The members on Monday evening had the privilege of hearing a good lecture by Professor Tichborne on B.P. revision. He spoke brightly, if not deeply, on the subject, and adapted his remarks to the requirements of students, saying many good things which they will be wise to benefit by. But Professor Tichborne did not really handle the subject as we

are entitled to expect from one who is a member of the General Medical Council, and who took an active part in the revision of the B.P. Probably he was disarmed by Dr. Attfield's report to him that "up to the end of last month the amount of errata reported was *nil*." What Dr. Attfield means by *errata* we do not know—probably misprints, such as "chlorides" for "carbonates." But of blunders and errors sufficient have been pointed out in criticisms which have appeared in this journal to warrant official correction. It is, however, noticeable that the Pharmacopœia authorities are by silence fostering the notion that the B.P. is a perfect book, and Dr. Attfield's statement to Professor Tichborne endorses the idea. Speaking at Edinburgh in July last, in reply to Dr. J. C. McWalter, who read a general criticism of the book from a physician's point of view, Professor Leech, the Chairman of the Pharmacopœia Committee, and Dr. Tirard, its Secretary, did not attempt to reply to any of the serious allegations which had been made previous to that regarding the Pharmacopœia standards. As therapeutists they naturally spoke about how and why medicines are included in or excluded from the B.P. Moreover, Professor Leech made an important declaration, in reply to Dr. McWalter, that the "Pharmacopœia should only become legally official some time after its contents had been fully made known to medical men and chemists. A special Act of Parliament, however, would probably be required to prevent the Pharmacopœia being legally in force immediately it was published. The General Medical Council could only act in accordance with the law as it now exists." This is a reasonable reply to much stringent criticism on the manner of publication. Now that a member of the B.P. Committee, who has the exceptional advantage of being an expert chemist and pharmacist as well as a medical practitioner, has offered his comments, it is disappointing that he should have touched upon at least one point of severe criticism (the testing for lead in citric and tartaric acids) without referring to the fallacy of the B.P. test as exposed by Messrs. David Ioward and Robert Warington. It is true that Professor Tichborne made no attempt to reply to criticism, so perhaps his silence may not be taken to imply that, in his opinion, the B.P. is free from serious error. There are in it many imperfections which have not yet been pointed out, as well as excellencies, and in order to present these in a compact form we have had prepared for our forthcoming DIARY an exhaustive treatise of a practical and non-contentious nature, which, we believe, will throw new light on the work. Two things are certain regarding the new B.P.—first, that there is a great deal of unexpressed discontent; unexpressed, because those who are capable of criticising have come to the conclusion that it is waste of their time to speak out, seeing that previously-declared views have been ignored. The case of opium mentioned last week is a good example. The second thing is that the contents of the new B.P. are not yet very well known. Even Professor Tichborne's lecture shows signs of this. He gave a list of B.P. medicines of which the strengths have been altered—sixteen altogether—amongst them pil. saponis co., said to be one-sixth stronger in opium. Is it so, or one-twelfth? Prof. sennæ co., says the Professor, is twice the former strength, but we can only make it to be 5 oz. ag. sulph. in 1 pint, and it was 4 oz. before, and we wonder whether the 5 oz. is really intended. To Professor Tichborne's list of sixteen preparations which are stronger, we can add another thirty, most of them as important as those mentioned by him; and to the weaker three we can add another thirty, most of which are more serious alterations than the three he names. If, therefore, a member

of the Pharmacopœia Committee shows this degree of unfamiliarity with the contents of the B.P., it is fair to conjecture that the rank-and-file of the trade have not yet mastered the details.

Anglo-French Trade.

FRANCE and Britain are so close together and their peoples mix so freely with each other that we rarely give thought to the volume of trade between the two countries. That the French are fond of our goods we know, and that we go to France to spend money in health-seeking and art-loving is a truism. But we appear to have the neglected details as well as the totals of our commercial relations, and the British Chamber of Commerce in Paris is trying to bring the facts home to British merchants by showing what the trade has been during the past twenty-five years—*i.e.*, the period 1872-1896. The following sums up the matter in francs:—

	1872	1896
French exports to U.K....	935,527,862	1,033,296,597
Proportion of the whole	24·9 per cent.	30·4 per cent.
French imports from U.K....	665,960,038	510,606,593
Proportion of the whole	18·6 per cent.	13·4 per cent.
Total French exports and imports....	7,331,942,827	7,199,499,554
Ditto, with U.K....	1,601,487,900	1,543,903,190

In other words, we are France's best customer, and take one-third of her total exports. No one buys half as much from her as we do. Belgium is second to us with 501,000,000f. worth of French goods bought; then Germany, 339,000,000; and next the United States, 224,000,000f. Only Belgium and ourselves go on increasing our purchases; the others buy less and less. France still buys most from us, 510,000,000, but here are the figures (francs) to speak for themselves:—

	1872	1896
Belgium ...	440,410,764	282,012,242
Germany ...	211,664,231	307,852,172
Great Britain ...	665,960,038	510,606,593
Italy ...	375,192,217	126,903,521
Russia ...	120,442,898	180,815,464
Spain ...	123,548,700	287,929,860
Turkey ...	159,398,459	90,192,550
United States ...	204,775,038	313,746,921
British India ...	101,054,401	167,745,344

The direct trade of British India with France is of much greater importance than many people in the United Kingdom are aware of. Like ourselves, France has to import a large proportion of her food, and of that British colonies and dependencies supply a share. In regard to the nature of France's imports, it is curious to note that the effect of putting on a tariff has been to increase the manufactured goods and decrease the raw materials. Thus in 1872 the imports of manufactured articles were valued at 452,359,242f., bearing average duty of 7 per cent.; and in 1896 they had increased to 618,384,997f., with an average duty of 9·1 per cent. There was an increase of tariff in 1892, which had the immediate effect of diminishing the imports of British manufactures from 255,211,160f. in 1891 to 224,978,939f. in 1892; but in 1896 the amount had increased to 238,794,944f., and the upward move seems to be established. A valuable section of the report deals with the Anglo-French trade in 1897, a comparison being instituted between the goods that France exports and imports to and from all countries and those which the United Kingdom exports and imports. The gross amounts show that we are far ahead of France, her imports of all kinds in 1897 amounting to 4,000,000,000f., as compared with our 11,281,000,000f., and exports 3,675,000,000f., as compared with our 7,354,000,000f. But the more interesting part of the section is devoted to the actual trade between France and the United Kingdom, and

with this we have already dealt. Our own departments of trade are, we notice, on the increase, chemicals showing 88 per cent. and oils 432 per cent. on the imports from the United Kingdom, but decreases in some other articles. The following are the values, in francs, for 1897:—

(I = increase; D = increase per cent.) :—

Imported into France from U.K. :—

Chemical products	...	27,626,000	I 8·8
I.R. and G.P. goods	...	7,327,000	I 1
Oils	...	4,988,000	I 43·2
Musk	...	888,000	I 44
Colours	...	1,316,000	D 3·1
Oil-seeds	...	847,000	D 56·8
Medicines	...	943,000	D 30
Bismuth	...	225,000	D 8·1

Exports from France to U.K. :—

Chemical products	...	14,996,000	I 7·2
Dyes	...	2,355,000	I 17
I.R. and G.P. goods	...	3,456,000	I 2
Colours	...	1,574,000	I 12
Oils	...	12,296,000	D 3·1
Perfumery	...	2,223,000	D 4·8
Glue	...	2,600,000	D 8·6
Indiarubber	...	1,266,000	D 20·8
Medicinal herbs	...	3,040,000	D 2·8

Some articles which France used to buy well from us have decreased greatly since 1872—e.g., beeswax, cochineal, phosphorus, gall-nuts, starch, safflower, and crude camphor do not figure at all now in the list of imports from the U.K. Some things, on the other hand, are better—e.g., petroleum—which we supplied to the extent of 1,196,307f. in 1896 (157,746f. in 1872). Patent medicines have been increasing in spite of the severe restrictions. In 1872 we supplied 6,953f. worth out of a total import of 14,797f., and in 1896 289,062f. out of a total of 483,680f. We have lost the trade in iodides, which amounted to 383,500f. in 1872, and 608f. in 1896.

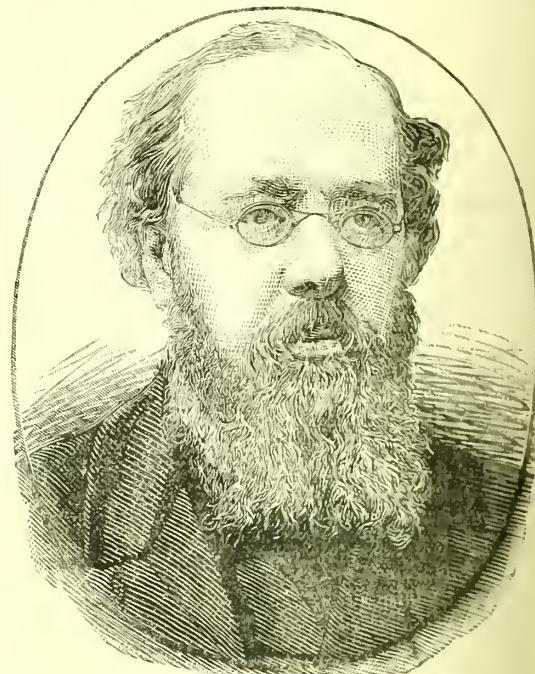
When we come to examine the details of the report in this way we find that it sadly lacks editing. In one place we find "medicinal pants" mentioned, and that is not the most glaring error. In one table "phosphite of lime treated with sulphuric acid, 1,113,072f." in 1892, and "hypophosphite of lime, 39,201f." in 1896, are put together, in comparison, as if they were the same thing. It is in this table that we learn how much our purchases of French quinine have fallen off—viz., from 656,000f. worth in 1872 to 81,900f. in 1896—but is this a falling off? Prices are to-day just about a tenth what they were in 1872, and if the report had given quantities we should have seen exactly where we are. It will be seen that the report as a whole is a timely one; it deserves the attention of our merchants, and even virulent editors on both sides of the Channel, who foment public passion, might read it with advantage, for, after all, trade is the real connecting-link between the nations, and political disturbance so unsettles it that the effects are felt by the humblest workers.

Business at Bloomsbury.

IT is generally at the November meeting of the Council of the Pharmaceutical Society, if at all, that new business is foreshadowed. For two or three months before May the Council is planning its own dissolution; for two or three months after May the new Council is getting fixed in the saddle, and then comes the holiday season. So there only remain two or three of the winter months when the affairs of pharmacy generally can get serious consideration. This year we gather the principal business is to reap the rewards of the great Amendment Act of 1898. Something, it appears, is being concocted which is to persuade some

thousands of chemists and druggists, who have not done so before, to pour their hard-earned guineas into the Society's coffers, and lest the arguments should not be convincing enough they are to be clinched by the President's own actual signature.

We expected that something in the way of a Bill would have been suggested, if not drafted, not perhaps for actual production next Session, but as a sort of promissory note. It may be in reserve for the December meeting, but the President's reproachful appeal to his Nottingham supporters to give the Council something more definite than mere "abstract resolutions" is not hopeful. As a rule we sympathise with the protest. To pass abstract resolutions at meetings where everybody is of the same mind is a poor sort of pastime, and it is particularly irritating when those resolutions are passed on to authorities who are expected



MR. ROBERT HAMPSHIRE.

to convert them into definite accomplishments, even in the face of the enemy. But the objection does not altogether lie this time. The particular policy which Nottingham and a great many other places are demanding just now is perfectly well understood. It may be a hopeless task, it may be inopportune to bring it forward just now, but there can be no doubt about what is wanted. For ourselves, we have no sort of faith in the earnestness of the Pharmaceutical Council in this matter. They have dallied with the question for twenty years, and have always refused to strip for the fight. Though the time seemed to have gone by when it would have been of any use to present their claim to Parliament, an opportunity was created for them only last summer—such an opportunity as they are never likely to get again—when two Lord Chancellors voluntarily declared themselves in favour of an amendment of the law in this respect, and this offer they deliberately rejected. To seize it would have jeopardised their Amendment Act, so the course taken was to appeal to the official head of the House of Lords to withdraw his amendment. Of course, we know that his proposal was not satisfactory as it stood; what we regret is that no effort even was made to bring it into harmony with the legitimate aspirations of chemists and

druggists. It is only just to add that the supporters of the Society all over the country approved of the Council's apathy, or, at least, did not protest against it.

Whether it be wise to attack company pharmacy just now may be open to discussion, but there can hardly be two opinions about action in the next Session of Parliament in respect to the poisons schedule. The Privy Council has put before us in black and white its policy, and we chemists have with rare unanimity declared against it. But the mischief which everybody wants to check continues. It is neither right nor politic that the coming Session should find us without our own propositions. It surely is not sufficient to block the legislation suggested by the Privy Council. Parliament may fairly expect something clear and definite from us. Dr. Symes suggests that the recommendations as to the storage of poisons, hidden away in the Society's Calendar, might be made compulsory. We have advocated that policy for years, and it would go some way towards meeting any reasonable complaint the Privy Council have of us. But there are other things, and especially the extension of the schedule, which are certainly as necessary. There would not be ten dissentient votes in Parliament against the inclusion of carbolic acid in the schedule, and as this cannot be done in the way the Act provides, it should be demanded in a Bill. Then, even if the Privy Council should renew its attempt to repeal the principle of the Pharmacy Act, we should be able to offer an alternative policy, and our experience last summer was that ours would be received with a good deal of sympathy.

The retirement of Mr. Hampson from the Council is an event which cannot be passed over without a comment. Mr. Hampson has been on the Council for more than a quarter of a century, and has been one of its most assiduous members. In his earlier Council days he had the character of a "reformer," and he was at that time thought to voice the opinions of the "trade" rather than of the "Society" section. Latterly he has been less aggressive and more official. Mr. Hampson has been the Honorary Treasurer of the Society for the past eight years, an office which involves a great deal of time and attention. We regret to hear that his retirement is due to his ill health. Our portrait of him, above, was one that we published when he was elected President of the Chemists' and Druggists' Trade Association some fifteen years ago.

PERIODETHYLENE OR DIODOFORM.

This is the name of a new substance which was brought under the notice of a recent congress of carbide and acetylene specialists held at Frankfort-on-Main by Professor Erdmann, of Halle. Periodethylene was first observed by McKean, and is prepared by the interaction of iodine and calcium carbide. It is a very light, innocuous, bright-yellow, and inodorous powder, and gives up its iodine when heated. It has the formula C_2I_2 , its synonym is diodoform, and it is used as a substitute for iodoform.

GERMAN PATENTS.

The present German Patent Law has been in force since 1877. Its principal characteristic is the rigid system of examination of specifications submitted, whereby a very large number of applications for patents are rejected. In 1897 no fewer than 222,000 applications were refused, and this year the number is expected to reach 246,000, leaving about 100,000 patents to be granted. The large proportion of rejections is due to the fact that the Government endeavour to protect the patentee by requiring stringent proof that the invention is novel; in short, the German patent-office undertakes what is left in the United Kingdom for the law-courts to decide. With us few patents can be said to be

valid until they have been proved to be so, but in Germany it is the few which are so weak as to give ground for legal action. In Germany, however, there is provision for registration of novelties in design, and under this only 5 per cent. of the applications for protection are refused. This is a comparatively recent provision, the law having been enacted in 1891.

The Solubility Value of Essential Oils.

By EDWIN DOWZARD, F.C.S.

IN the physical examination of essential oils a number of tests are applied, such as specific gravity, optical rotation, &c., and, in some instances, the solubility in alcohol. Up to the present time the solubility (except in comparatively few cases) has not been considered of much importance. This is not surprising when we take into consideration the method usually adopted. An accurate determination of the solubility in alcohol will afford in many cases information unobtainable by any other physical test. One great disadvantage of the method now in common use is that the results obtained with different oils varying greatly in solubility are not directly comparable. The method about to be described possesses the following advantages:—(1) Only one strength of alcohol is necessary; (2) the results represent the actual solubility; and (3) they are directly comparable.

Five c.c. (accurately measured) of oil are mixed with 10 c.c. (accurately measured) of alcohol (sp. gr. .799 at 15.5° C.), water is then run into the solution from a burette until the solution becomes turbid. The end-reaction is very distinct. Oils of great solubility usually give an opalescent solution before becoming turbid. The number of cubic centimetres of water required to produce turbidity is multiplied by 100, the result being termed the "solubility value."

The determination of the solubility by this method only occupies a few minutes, and its advantages over the old method are obvious. The following table gives the results which have so far been obtained:

Oil of	Solu- bility Value	Number of Samples	Sp. Gr. (15.5° C.)	Optical Rotation. 100-mm. tube,
Anise ...	120-130	3	.981-.987	to -1° 25'
Bergamot ...	235-255	4	.883-.8845	+12° to +15°
Cajuput ...	450	1	.923	-1° 30'
Cananga ...	265	1	.916	-21°
Caraway ...	250-290	3	.911-.917	+74° to +79°
Citronella ...	335-350	3	.902-.906	-10° to -12°
Clove ...	740-780	4	1.048-1.054	to -1°
Coriander ...	520-530	2	.870-.875	+9° to +12°
Dill ...	320-330	2	.907-.915	+72° to +75°
Geranium ...	575-595	4	.895-.898	-7° to -10°
Lavender (Eng.)	520-560	4	.885-.891	-8° to -9°
" (French)	490-500	3	.888-.895	-5° to -8°
" (Spike)	470-495	2	.908-.913	+2° to +3° 30'
Lemongrass ...	460-470	2	.900-.902	-1° to -3°
Nutmeg ...	120-125	2	.885-.905	+14° to +16°
Orange ...	60	2	.849-.851	+91° to +98°
Peunyroyal ...	460-475	2	.925-.936	+21° to +23°
Peppermint (Amer.)	200	1	.909	-22°
" (Eng.)	360-460	4	.905-.906	-23° to -25°
Pimento ...	730-780	4	1.045-1.049	-1° to -4°
Rosemary (Eng. and French) ...	285-325	3	.913-.916	+2° to +9°
Rue ...	450-465	2	.835-.837	+1° to +2°
Sandalwood (E.I.)	390-400	6	.975-.978	-17° to -18°
Sassafras ...	130-145	3	1.065-1.069	+2° to +3° 30'
Savin ...	190	1	.922	+53°
Tansy ...	475	1	—	—
Thyme ...	290	1	.910-.924	-3° to -5°
Turpentine (Amer.)	50	1	.860	+7°

The sp. gr. and optical rotation figures added are the averages for pure oils, determined within the past twelve months, and in a few cases refer to those oils whose solubility values are given.

Liverpool, October 13.

The Winter Session.

Leeds Chemists' Association.

THE annual meeting of this Society was held in the Institute of Science, Art, and Literature, on October 26, Mr. Geo. Ward, F.I.C., Vice-President, in the chair.

Mr. W. D. POLLETT (Hon. Secretary) read the thirtieth annual report, which stated that the numerical strength of the Society was maintained, whilst its usefulness as an educational aid for associates preparing for the Minor examination was not decreased. The library possesses a good number of "up-to-date" books, and had been regularly supplied with the trade journals. Under the auspices of the Society social evening meetings had been held during the session, when trade subjects were discussed. An attempt had been made to get up a series of lectures in conjunction with the Leeds Technical School upon pharmaceutical chemistry, to be held during the day, but so few promised to attend that the idea had to be given up; perhaps another attempt may be more successful next year.

The Council had supported the Pharmacy Act Amendment Bill, and had taken steps to oppose the Poisonous Substances Bill. It declared its sympathy with the objects of the P.A.T.A., and had signified its willingness to work in conjunction with that Association.

The receipts for the past year had been 9*l.* 7*s.* 6*d.*, and the expenditure 10*l.* 2*s.* 9*d.*

The report and financial statement were adopted on the motion of Mr. R. REYNOLDS, F.I.C., seconded by the CHAIRMAN.

Votes of thanks were accorded to the officers of the past year, and the following were elected the officers of the present year:—President, E. Yewdall; Vice-President, Mr. G. W. Worfolk (Ilkley); Hon. Treasurer, Mr. J. J. Anning; Hon. Secretary, Mr. W. D. Pollett; Council, Messrs. I. H. Blacock, F. W. Branson, F.I.C., W. Johnson, R. Reynolds, F.I.C., S. Taylor, G. Ward, F.I.C.; Auditor, Mr. E. Brown.

Manchester Pharmaceutical Association.

A TRADE COMMITTEE FORMED.

AT a meeting of the Manchester Pharmaceutical Association, held at the Victoria Hotel on Monday evening, October 31 the President (Mr. George Woolley) in the chair, it was resolved to form a "Trade Committee" to act in concert with the Association. Mr. Walter Gibbons, pharmaceutical chemist, Market Street, was elected Chairman, and eight other chemists were appointed members of the committee, Mr. J. A. Jones, of 161 Bury New Road, being the Hon. Secretary. Several resolutions, which it is not desired to make public, were passed. The committee will meet once a month, or oftener, as may be required, the first meeting being convened for a fortnight hence. The main object of this committee will be to represent on the Manchester Pharmaceutical Association the P.A.T.A., and keep in touch with that body in London. It is felt that if the chemists and druggists in Manchester will only rally round this committee, it will have a good effect in bringing in closer connection with the Association those who have hitherto held aloof from it. The policy which has chiefly guided the Manchester Association in the past has been rather scientific than practical. Many chemists have a strong feeling with regard to their trading interests. The new committee, it is hoped, will exercise a beneficial influence upon retail prices all round. In asking Mr. Gibbons to accept the chairmanship of the committee, the Association have in a friendly way put an end to the Manchester Pharmaceutical Defence Association, which Mr. Gibbons was instrumental in founding, and will strengthen the parent Society by bringing in those active spirits with whom he has for some time past been working.

Midland Chemists' Assistants' Association.

AT a meeting of this Association, held on October 25, Mr. J. Selby, Vice-President, in the chair, Mr. F. H. ALCOCK read a paper on "Bacteria," which was illustrated by lantern-views manipulated by Mr. J. Davis. Mr. Alcock classified

the different bacteria, explained their functions as illustrated in the changes set up by them in urine, milk, and saccharine fluids, and the part which they played in putrefaction. He next dealt with the formation of nitrites and nitrates in soil, and the value of these in the economy of Nature, spoke of the position of bacteria in their relation to plant-life, and described their composition and mode of production. The following were thrown upon the screen as types of the different classes of bacteria:—Micrococcii, diplococcii, streptococcii, *Micrococcus tetragonia*, *Sacrina lutea*, the dumb-bell shaped cells of the *Bacterium turius*, the various stages of the bacterium which produces wool-sorters' disease, the bacillus tuberculosis, the leprosy-bacillus; also specimens of the spiral variety, including the bacilli of Asiatic cholera, known, because of its microscopic appearance, as the comma bacillus; several specimens of the common marsh spirochæte. Vibrios were represented by the *Vibrio rugula*, which is said to possess the power of causing fermentation of cellulose. An enormously magnified specimen of *Saccharomyces cerevisiae* was next shown, and its life-history described, together with the part it plays in the art of brewing. Pictures were also shown of the hyphomycetous fungi (*Mucor Mucedo*), and the *Pencillium glaucum*, one of the commonest fungi, well known to pharmacists as being concerned in the production of lactic acid from saccharine fluids. When the bacteriological series was completed, as some time still remained, a series of beautiful microscopic objects, including the proboscis of the blow-fly, the tongue of the hive-bee, the spiracles of the water-beetle, the eyes of the ephemerid-fly, and many vegetable and mineral objects were exhibited. Mr. Alcock and Mr. Davis were heartily thanked.

Edinburgh Chemists', Assistants', and Apprentices' Association.

THE opening meeting of the twenty-first session was held on October 26, Mr. G. H. C. Rowland (President) in the chair.

The SECRETARY read the report of the Prize Committee, from which it appeared that the McLaren prize for excellence in prescriptions, botany, chemistry, and materia medica had been gained by Mr. George Mack, 119 George Street. The prize, value 2*l.* 2*s.*, may be invested in any course of instruction for the Minor examination approved of by the committee. The Bowman botanical prize, value 1*l.* 1*s.*, for best knowledge of the practical botany embraced in the excursions and summer meetings of the previous session, had been gained by Mr. J. G. Murdoch, 89 Gilmore Place.

Mr. McLaren, the donor, presented his prize to Mr. Mack in the form of a ticket admitting him to a course of instruction in the Royal Dispensary School of Pharmacy. In the unavoidable absence of Mr. John Bowman, Mr. McLaren also presented the Bowman prize—copies of Green's "Botany" and Perkin and Kipping's "Organic Chemistry"—to Mr. Murdoch.

A vote of thanks was passed to Messrs. Bowman and McLaren for their generous donations.

The CHAIRMAN then delivered his address. He said memories of Flodden must have passed away when he—a foreigner from the southern kingdom—had been elected President of their Association in its twenty-first session. Sketching the history of the Association, he said in 1853 a Pharmaceutical Improvement Association was founded in Edinburgh, and flourished for about eight years. In 1861 another abortive attempt was made to found an association. In 1862 an assistants' association was formed, called the Wilsonian Association, in honour of Professor George Wilson, who occupied the chair of chemistry in the Edinburgh University. This Association met weekly till 1871. In 1872 a Young Men's Chemists' and Druggists' Association was formed, but it had a very short existence. The present Association originated from a suggestion at an Assistants' dinner in the Windsor Hotel in 1877, and was formed the next year. Great good had resulted from the Association's prize schemes, many of the winners having attained to high distinction in medicine and in pharmacy. On questions such as the admission of women to the Pharmaceutical Society, a compulsory curriculum for pharmaceutical students, the metric system of weights and measures, and the extension of the Preliminary examination, the Association

had been not only abreast, but often considerably in advance, of the general body of pharmacists. It had also been distinguished by the fact that almost all the papers read to the Association had been contributed by members, and had dealt largely with original and practical work relating to subjects of pharmaceutical interest.

A vote of thanks to the President for his address was moved by Mr. J. D. SINCLAIR (Vice-President), and seconded by Mr. J. LAIDLAW EWING, who congratulated the Association on the attainment of its majority. Some of them on the previous evening had the pleasure of hearing a distinguished statesman discoursing on the value of such associations in bringing young men together and producing that sharpening of wit which results from the contact of mind with mind. One point which he thought that statesman omitted was the value of associations for chastening self-conceit and engendering mutual respect. Referring to the Pharmaceutical Society, Mr. Ewing reminded them that they were indebted to the Society for a beautiful hall in which to hold their meetings, and they were also indebted to the Society for the help of the Assistant-Secretary, who had always been distinguished for his sympathy with the hopes and aspirations of young men.

Mr. DAVID McLAREN, President of the Trade Association, and the first Vice-President and oldest surviving President of the Association, also spoke, and the vote of thanks was carried.

Mr. D. B. Kidd was elected Assistant-Secretary.

Swansea and District Chemists' Association.

THE annual meeting of this Association was held at the Cameron Arms Hotel, Swansea, on October 27, Mr. James Hughes (President) in the chair. There was a good attendance of members and Mr. Hughes was re-elected President, Mr. Dryden, Vice-President, and Mr. Davies Secretary for the ensuing year. The finances of the Association were known to be in a satisfactory condition, and it was decided to donate one guinea to the Swansea Hospital, and a like amount to the Benevolent Fund. The meeting then discussed the official report of the Federation of local Pharmaceutical Associations' meeting at Belfast, and a communication from the P.A.T.A. The consideration of both questions was adjourned, and the annual dinner was proceeded with. After dinner, the usual loyal toasts having been honoured, "The Medical Profession" was proposed by Mr. LLEWELLYN THOMAS and responded to by Dr. EDGAR EVANS. The toast of the "Swansea and District Chemists' Association" was coupled with the names of Mr. N. M. Grose and Mr. Isaac.

Western Chemists' Association (of London).

At a committee-meeting held on Wednesday, October 26, the following gentlemen were elected officers for the ensuing year:—President, J. F. Harrington, 45 High Street, Kensington, W.; Vice-President, A. G. Worsley, 135 Ladbroke Grove, W.; Hon. Treasurer, J. H. Mathews, 68 Queen's Gardens, W.; Hon. Secretaries, Herbert Cracknell, 17 Craven Road, W.; W. J. Philp, 34 High Street, Notting Hill, W.

Glasgow and West of Scotland Pharmaceutical Association.

The opening meeting of the session of this Association took place in the Rooms, 94 West Regent Street, Glasgow, on the evening of Thursday, October 27. Mr. W. L. Currie, the President, was in the chair, and there was a crowded audience.

The CHAIRMAN referred to the passing of the Pharmacy Amendment Bill and the dropping of the Poisons Bill. He said it was a great gratification to the Association to have been able to secure Dr. Stockman as their opening lecturer. Dr. Stockman did not come among them a stranger, because he had been in Edinburgh a considerable time.

THE EVOLUTION OF OUR PHARMACOPOEIA.

Ralph Stockman, M.D., F.R.C.P.E., Professor of Materia Medica and Therapeutics in the University of Glasgow.

Dr. STOCKMAN said that when he received the invitation to give the opening address of the session, while fully

appreciating it, he felt a little doubtful as to his ability to prepare an address of sufficient interest to pharmacists, for although their pursuits were in some respects akin, his acquaintance with pharmacy was so slight compared with



PROFESSOR RALPH STOCKMAN, M.D., F.R.S.E., &c.

that of his audience, that he must appear a mere novice in the art and mysteries of their ancient calling. But there was one subject of great and mutual interest to them—namely, the British Pharmacopoeia, and the issue this year of a new edition had directed their minds specially towards it. He had a very small share in the preparation of the present edition, and while engaged on it his attention was drawn to the fact of his own ignorance with regard to all Pharmacopoeias except our own, and especially with regard to the evolution of the modern pharmacopoeia out of the more ancient compilations of the same class. He therefore made a slight effort to extend his knowledge in this direction, and proposed to lay before them a part, at least, of the result.

The origin of the use of natural substances as remedial agents, he continued, has given rise to a good deal of speculation. It is probable, however, that

PRIMEVAL MAN

originally acquired some such knowledge and practice as we see in dogs, for instance, and wild animals at the present time; that as his intelligence grew this knowledge became extended, and resulted ultimately in the large mass of information we now possess. It is thought that all kinds of plants and their products were originally tried as foods, and that the consequent acquaintance thus obtained with the carminative, purgative, emetic, or other effects of some of them resulted in the use of these being restricted to medicinal purposes. This much is certain, that from time immemorial mankind has placed a high value on the remedial action of many plants and natural products. Among the most primitive peoples there is always a certain knowledge of domestic medicine, the practice of which is largely in the hands of women, but very early in upward development we usually find it transferred to special medicine-men or combined with priestly functions.

Dr. Stockman then briefly sketched the history of Egyptian, Greek, Roman, Arabian, and mediæval medicine.

In the fifteenth and early sixteenth centuries, Dr. Stockman said, a number of manuals were written especially for apothecaries by different authors, none of whom were men of any great note. The titles sufficiently explain their purpose: *Luminare minus, seu Lumen Apothecariorum*, Venice, 1517; *Luminare majus*, Venice, 1496; *Compendium Aromaticariorum*, 1488; *De Medicamentis Simplicibus et Compositis*, Venice, 1491; *Manipulum Medicaminum*, 1523; *Officina Apothecariorum*, Lyons, 1532, and others of the same kind. The mediæval pharmacist, it is evident, was by no means badly supplied with manuals to guide him in his work.

The first book of the kind to receive the impress of any

authority beyond that carried by the author's name was the *Antidotarium Florentinum*, Florence, 1498, a collection of medical receipts sanctioned by the university or medical college of the city. But

THE FIRST PHARMACOPEIA

sanctioned by the civil authority, and enjoined to be used under penalties by dispensers and compounders of medicines, is that of the town of Nuremberg, published in 1545 under the title "Pharmacorum conficiendorum Ratio, vulgo vocant Dispensatorium, &c." It was compiled by Valerius Cordus, at the early age of twenty-seven, from various sources, but is chiefly founded on the practice of Galen. During a short residence in Nuremberg, he showed it to the physicians composing the medical college or guild, and they prevailed upon the town council to adopt it, and make it authoritative on all under their jurisdiction. Its contents comprise the collection and keeping of simples, adulterations, succedanea or *quid pro quo*, weights and measures, and a large number of formulae. In this book, therefore, the style and methods of which have been closely followed down to the present day, we have exactly the modern pharmacopeia. The word antidotarium was the most common title for such works, and means "something given in opposition" to the disease, or dispensatorium, implying the giving out or dispensing of the medicine. The term pharmacopeia is not met with till 1561, when we find it twice, in the "Compendium Pharmacopœia Joannis Placotomi," Lyons, 1561, and "Pharmacopœia Medicamentorum omnium, quæ hodie in officinis exstant, tractationem et usum ex antiquorum medicorum præscriptio continens," Basel, 1561, a work by Anutius Foesius.

In the Nuremberg Pharmacopœia are to be found much the same preparations as in the British Pharmacopœia of to-day, and under the same names—pulvis, pilula, trochiscus, mel, syrups, unguentum, aqua, oleum, and so on. As a rule the formulæ are much too complex, and often contain substances of no efficacy, but a great many of them must be regarded even at the present day as quite efficient. As a fair example we may take the Electuarium Commune, which is directed to be made as follows:—Pulpa cassiae, pulpa tamarindorum, seræ mundatae, aa. 3ij.; rhabarbari, violarum, anisi, polypodii, aa. 3j.; sacchari albi, 3ij.; liquoritiae, 3ij.; tritis conterendis et incisis reliquis, admisceatur syrups polypodii, 3ij.; sem. foeniculi, 3vj.; cum aquæ pluvie quantitate sufficiente et sacchari optimi, lb ij. paratus. This would make a very agreeable laxative.

It is difficult, however, to understand the value therapeutically of the "species de gemmis" made up of ivory, pearls, coral, sapphire, granite, and other stones, with sugar, roses, borage, &c., or the "pulvis contra casum," consisting of crabs' eyes, mummy, dragon's-blood, dried goat's-blood, clay, and rhubarb. But the whole book is a mixture of good and bad receipts, the former perhaps preponderating. The internal administration of precious stones as medicines had in much earlier times grown out of the custom of wearing them as amulets and charms against witchcraft and evil spirits generally, a custom traces of which still linger among us. A large number of the Nuremberg formulæ owe their activity to essential oils and resins, such drugs as galbanum, cassia, fennel, myrrh, turpentine, cloves, roses, &c., occurring over and over again in all sorts and varieties of combinations. But we also find opium, aloes, aconite, nux vomica, elaterium, saffron, antimony, cream of tartar, sulphur, mercury, arsenic, and other powerful drugs largely relied on by ourselves for their therapeutical activity. Tea-leaves, curiously enough, has a footnote giving references, as if they were not well known (in the 1656 edition). Many precious stones are enumerated among the simples, but it is when we come to the animal kingdom that we find the greatest difference from our modern *materia medica*—millipedes, cranium and skin of man, huter from woman's milk, human fat, swallow's nest, and many similar substances being included. No description of the different drugs is given, and no doses.

THE PHARMACOPEIA AUGUSTANA (AUGSBURG, 1646)

is a handsome volume, and in some ways one of the most interesting of its time, owing to the minute and paternal directions given to the apothecaries by the editor and by the town council under whose authority it is published. The frontispiece is most elaborate, and shows the implements

and furnishing of the apothecary's shop—scales, pots, jars, mortar and pestle, retorts, and even the labels—almost exactly as they are to-day. The Dean and Medical College of Augsburg, eleven in number, and one of whom is described as Officinarum Pharmaceuticarum Visitator ordinarius, dedicate it in pompos Latin to the town council. The introduction concerning the duties of the pharmacopœia (pharmacist) is amusing, and I may, perhaps, be permitted to quote a piece here and there. "As in the province of medicine the pharmaceutic art vindicates for itself not the least humble place, and as it exists as an integral part of medicine, moreover as medicine among civilised peoples has always been held sacred and holy, therefore it is necessary that the pharmacist should be an honest man, trained in his art, holding exactly the reason and mode of preparing medicines, and properly skilled." It then goes on to explain that he should have what we in these days would call a high ideal of duty. "Therefore he should blush to do in secret what he would not do publicly: he should do nothing in his profession negligently or rashly, much less fraudulently, and that not from the fear of punishment, but from a love of virtue; that he be pius humanus, benignus, affabilis, placidus, misericors, officiosus, ac erga pauperes mitis et liberalis, publica propriis ac privatis anteponens." Besides being a model of all the virtues, he is directed to have a good knowledge of Latin, not only that he may correctly read prescriptions, but that he may improve himself by study, and thus become a good judge of drugs, being able to distinguish between bona, mediocra, and optima. The shop is to be in a healthy and good locality, remote from dust, fumes, and smell, the drags and furnishings to be kept clean and in good condition. Without a prescription or permission from the magistrates, he is not to sell poisons, love-philters, emmenagogues, nor abortifacients, neither himself nor by his servants or apprentices. In filling prescriptions he is to be vigilans, circumspectus, et fidelis; he must neither add nor subtract anything. Succeeding chapters deal with the collections, choice and preservation of drugs, antidotes, weights and measures, and other matters. At the end is a decree of "the most illustrious town council" of Augsburg concerning physicians, surgeons, and pharmacists. When necessary they are to confer together faithfully, candidly, and diligently for the public good. Surgeons, barbers, and bath-keepers shall not overstep the limits of their own callings, but, mindful of their oath and office, shall only perform those services to the patient which appertain to their several callings, preparing no medicines, much less administering them, and very much less selling them. Quacks of all kinds are forbidden the town, under the description of strollers, charlatans, empirics, apostates, Jews, artisans, fortune-tellers, pedlars, sleight-of-hand men, secret-medicine vendors, old women, and bombastic doctors. One paragraph is especially paternal: "That the good feeling between pharmacists and physicians may remain untouched, we will that no physician or pharmacist extol unduly one to the prejudice of another, or lower him by evil speaking." There are many good receipts in this book by means of which an experienced and acute physician could treat well many conditions, but he would have to pick and choose carefully. There are also many valuable observations contained in notes appended to the formulæ. For example, of a compound of opium and hyoscyamus it says "this divine remedy has the most stupendous effect in lessening the acutest pains."

The Pharmacopœia of Brussels (1671) has a close resemblance to the preceding, as has also that of Cologne (Pharmacopœia Coloniensis, 1627). These are large, handsome volumes, beautifully printed and, like the others, with interesting frontispieces. Both have several Latin poems prefixed in praise of the authors and their work, while the latter has some curious rules in Latin verse regarding the choice of good drugs. Of asafetida the rule is given, "Quæ mage fetorem facit Assa, hanc dic meliorem." Whoever wishes to be a good judge of simples is advised to read these carefully, and commit them to memory.

We may turn now to

THE PHARMACOPEIAS OF OUR OWN COUNTRY,

and I shall treat those of England and Ireland very briefly. In 1621 the College of Physicians published the first edition of the *Pharmacopœia Londinensis*, which was made authori-

tative in England and Berwick-on-Tweed by an order of the King in Council. For the next hundred years it did not differ much from the very worst continental ones. Thus in 1668 over 1,200 simple medicines are enumerated in its catalogus simplicium, and these include the fat of man, lion, and vulture, hair, urine, blood, &c. One item is specially curious—cranium humanum violente morte extinctum. In 1721 it was greatly simplified, and there was a steady improvement till the last edition was published in 1851. This is still in Latin, but contains only 273 separate drugs, apart from their preparations. Previous to the publication of a Pharmacopoeia, some of the books I have mentioned earlier and Gerard's well-known Herbal were in use in England by apothecaries. The first edition of the Dublin Pharmacopoeia was published in 1807, the last in 1850.

The first authoritative Pharmacopoeia in Scotland was compiled and published by the Royal College of Physicians of Edinburgh in 1699. This body had by their charter the right, along with a magistrate and pharmacist, of inspecting the apothecaries' shops in Edinburgh and Leith and neighbourhood, and of destroying such drugs as were not of good quality. By virtue of these powers they were able to impose their Pharmacopoeia on the druggists in their own district, but it soon became authoritative all over Scotland as the Edinburgh Pharmacopoeia. The first edition is to outward appearance a very humble production, badly printed and poorly got up, but dedicated to King William. The preface states simply that, although many Pharmacopoeias are in use, none of these suit the case of Edinburgh. They contain too many drugs and compounds, hence a selection has been made of those in everyday use. Its object is stated to be to secure the public safety, and that the apothecaries may compound their drugs in a uniform way. It enumerates nearly 900 simples, these being the usual mixture of what we now consider to be efficacious or the reverse. Against such substances as opium, aloes, arsenic, chalk, we have to set mummy excrements, precious stones, &c. Most of the compounds, however, are not nearly so complex as in some of the Pharmacopoeias of the same date which we have looked at, and some are extremely good. For instance, the pulvis contra vermes consists of santonica and rhubarb, the qua styptica contains alum, and the pilula hysterica safetida, galbanum, castor, &c. The last edition of the Edinburgh Pharmacopoeia appeared in English in 1841, and also is a modest volume. We find in it iodine, potassium iodide, quinine, bismuth, morphine, strychnine, ergot, and numerous inorganic products, although chloroform, bromide of potassium, chloral hydrate, and tannic acid are still absent. Descriptions of the drugs and of processes of manufacture are often given, but no doses. Since the first edition it has reduced the number of supposed efficacious drugs from nearly 900 to a little over 300, the latter comprising, as we have just seen, many new and much more potent remedies than in former times.

From the very beginning the preparations of the London and Edinburgh Pharmacopoeias are for the most part the same as those of the present day. Some of the names, however, have become obsolete. Thus a common preparation is the loch, or loch (the same word as lick), or what we wadays sometimes call a linctus; another is the rob, which is the juice of ripe fruit mixed with honey or sugar; and a third the quiddany, which was a sort of infection.

This brings us to the British Pharmacopoeia, the first edition of which was published in 1864 by collating those of London, Edinburgh, and Dublin, and the whole history of which and its successors is accurately set forth in the preface to the present edition.

WAS OLD MEDICAL PRACTICE AS BAD AS THE PHARMACOPEIAS.

In conclusion, Dr. Stockman raised the query whether the earliest Pharmacopoeias reflected accurately the state of therapeutics at the time of their publication—the seventeenth and early eighteenth centuries. At that time the practice of medicine in both countries, but especially in Scotland, was in a very backward state, and medical teaching was still more so. Scotch physicians, for the most part, gained their education in continental schools, but the number of such men was comparatively small, and a great

deal of the medical practice of the country was in the hands of quite incompetent persons. Dr. Stockman made allusion to several of the popular treatises of domestic medicine, including the "Arcana Fairfaxiana," a manuscript book of domestic medicine, undoubtedly used by members of the well-known Fairfax family in England, and a *facsimile* of which has been published by Mr. Geo. Weddell, of Newcastle-on-Tyne, and the "Pharmacopoeia Bateana," a collection of the recipes of Dr. Bate, who was physician to two kings of England and the Protector. He quoted also Burns's description of Dr. Hornbook's armamentarium, which was probably taken from some apothecary's shop of the time:—

Calces o' fossils, earths and trees;
Sal-marium o' the seas;
The farina o' beans and peas;
He has't in plenty.
Aqua-fortis, what you please,
He can content ye.
Forbye some new uncommon weapons.
Urinus spiritus o' capons,
Or mitc-horn shavings, filings, scrapings;
Distilled per sc;
Sal-alkali and midge-tail clippings,
And mony mae".

Dr. Stockman added:—I am inclined to think, however, that the actual practice of medicine was not in such a backward state as these books would lead one to expect. No doubt such cures were used popularly, just as some of them are to the present day; but I doubt if their use was very wide-spread, or encouraged by the bulk of physicians. I have come to this opinion from the perusal of a rare and interesting little volume entitled "Pharmaco-Pinax; or a Table and Taxe of the Prices of all usual Medicaments, Simple and Composed, contayned in D. Gordon's Apothecarie and Chymical Shop, within Mr. Robert Farquhar's high Lodging in New Aberdene. Aberdene, anno 1325." This is a list of the medicines kept in the shop, with prices attached, and it professes to contain all those in common use. It has a remarkable resemblance to similar price-lists of the present day. To be sure, we find human fat priced at 12s. Scots per oz., mummia of Egypt at 2s. Scots per dr., and powder of earthworms; but these almost exhaust the list of such things, and otherwise the wares offered are ointments, plasters, pills and powders, which differ only superficially from those of to-day. He also has on sale "For Bairnlie Diseases" a "Syrope for the Kinkhost" at 3s. Scots per oz., an "Electuarie for Tooothing," and "For Decoremment" "Water to make yeallow Haire," "Sweet Soape-balls to wash the Hands," and so on. The preface is extremely interesting in many ways, but I have no time left for it. He says that "Hitherto in all the North part of this Kingdome, there hath been no well-ordered Apothecarie Shop," and announces himself as a pioneer. Further on he says "If anie of the People finde our Medicaments too deare, wee are not malecontented that they go to others (having, notwithstanding, first essayed, if anie Deduction may be made), providing they be eased, which is the chiefe thing we aime at."

I am clearly of opinion that such a trade price-list compiled by a man for the use of his customers, and whose worldly prosperity depended on his supplying them to their satisfaction, more accurately represents the drugs in actual everyday use than any medical compilation made at an age when ancient authors were slavishly followed, and tradition held all-powerful sway.

Mr. FOSTER, proposing a vote of thanks to Dr. Stockman, which was cordially given, said they all felt when Dr. Stockman was appointed to the *materia medica* chair in Glasgow University that a proper appointment had been made. They hoped that Dr. Stockman would find his way often to the rooms of the Association.

Mr. SUTHERLAND, seconding, remarked that after the interesting lecture they had listened to, they would henceforth look upon themselves as members of an ancient and honourable and distinguished calling, the honourable traditions of which they should do their utmost to maintain.

The PRESIDENT said in Professor Stockman they had a gentleman who would inculcate in the rising generation of medical men the true method of treating disease. He would teach them how to prescribe drugs pure and simple, and would not recognise in any way many of the medicaments and compounds at present thrust before them, and of which they knew little or nothing.

Bradford and District Chemists' Association.

A SOCIAL evening of this Association was held on November 1 at the County Restaurant, Bradford. A pleasant evening was spent with music and song.

Society of Chemical Industry.

NOTTINGHAM SECTION.

At a meeting held on October 26, at University College, Nottingham, Mr. James O'Sullivan in the chair, Mr. L. ARCHBUTT, F.I.C., read a short paper on

"ARACHIDIC ACID IN RAPE OIL."

He gave the results of observations that led him to suspect that arachidic acid in olive oil did not necessarily indicate adulteration with earth-nut oil, as is generally supposed, but might be due to the presence of rape oil. He had found, by Renard's process, as much as 1 per cent. of crude arachidic acid in rape oil, thus more than confirming the previous observations of Ponzo, who had found 0.4 per cent. of this acid. In the discussion which followed, Mr. Archbutt stated that the crude arachidic acid from arachis oil had been found to be a mixture of arachidic acid ($C_{20}H_{40}O_2$) and lignoceric acid ($C_{22}H_{48}O_2$). By repeated recrystallisation from alcohol he had not been able to raise the melting-point beyond 73.3°C , that being the point of incipient fusion determined by means of a capillary-tube open at both ends. Mr. Archbutt also read a paper on

"THE CONSTANTS OF CURCAS OIL."

Having had occasion to examine an oil of which he had no description, he was led to believe that it was curcas oil, although some of the constants did not very closely agree with other published figures. He ultimately obtained an undoubted specimen of the oil from Dr. Lewkowitsch, and examined it, with the results shown in the following table, which seem to indicate that the undescribed oil was a genuine curcas oil. It is of interest to note that there is considerable difference between the constants now obtained and the only ones hitherto available, given in the last three columns of the table:—

Analytical Data	Crude oil	Refined oil	Refined curcas oil from Dr. Lewkowitsch	Constants of curcas oil as stated by			
	Undescribed			No. 1	No. 2	Gerard	
						Horn	
Sp. gr. at 60°F .	0.9205	0.9205	0.9205	0.911	0.9192	0.920	
				at 15°C .			
Saponification value, per cent. ..	19.28	19.25	19.26	—	23.05	21.02	
Iodine value ..	98.0	99.5	98.8	—	127.0	100.9	
Hehner value ..	—	95.2	—	—	87.9	—	
Acetyl value (Lewkowitsch) ..	14.03	9.82	8.33	—	—	—	
Reichert-Meissl value ..	—	0.28	0.48	—	0.65 ^a	—	
Acidity (as oleic acid) per cent. ..	11.8	0.36	4.46	—	—	—	
Unsaponifiable matter ..	—	0.56	—	—	—	—	
Melting-point of fatty acids °C. ..	—	27.5°	—	—	—	24.25°	

* Reichert value.

Dr. KIPPING remarked on the considerable difference in the acetyl values of the crude and the refined oils, asking whether the author could offer any explanation. Mr. ARCHBUTT replied that he could not, as there was no

evidence of the crude oil having undergone oxidation. No doubt the oil supplied by Dr. Lewkowitsch had been refined by an acid, and No. 1 by an alkali-process. Mr. CARULLA thought it should not escape notice how closely the sp. gr. agreed in the three oils tested by Mr. Archbutt, especially in view of the differences in the three others.

In the third paper read, Mr. J. T. WOOD showed the part that bacteria and the purely chemical compounds obtained from dung play in the process of preparing skins for tanning. These investigations have an important bearing on the production of an artificial bate having the properties of the dung-bate, and which will not only be clearer, but more certain and regular in its action.

In the course of the evening the death of Mr. E. Rider Cook was referred to, and it was agreed to send a letter of sympathy to Mrs. Cook.

Personalities.

MR. T. MCCALL WHITE, who some time ago disposed of his Wigton pharmacy to Mr. W. H. Younghusband, is now earning a reputation as a successful preserve-manufacturer.

DR. NORMAN COLLIE, F.R.S., is announced to read a paper to the Royal Geographical Society this session, entitled "In Search of Mount Hooker and Mount Brown in the Canadian Rockies."

PROBATE has been granted of the will of Mr. Thos. Wm. Hill, of Froxiner Court, Worcester, son of the late Mr. Thos. Rowley Hill, M.P., vinegar-manufacturer. The personalty amounts to £141,476*l.* 4*s.* 9*d.*

MR. W. S. CROUCH, pharmaceutical chemist, of the Colombo Apothecaries' Company, who has been suffering from dysentery since July last, is coming home per s.s. *Himalaya* in order to recuperate his health.

MR. D. C. ROBERTSON, of Blantyre, Central Africa, whose bicycle-race with a lion the daily papers are recording at present, is a registered chemist and druggist. Mr. Robertson served his apprenticeship in Galashiels, but after passing the Minor in 1895 he forsook pharmacy for the more lucrative profession of coffee-planting in Central Africa.

Business Changes.

BOOTS (LIMITED) are about to open branch-premises in Fishergate, Preston.

MR. E. GANE INGE, late of Farnham, has purchased the business of Mr. Peter Aylwin, High Street, Haslemere, Surrey.

MR. J. R. KIRK, pharmaceutical chemist, has purchased the business lately carried on by Mr. W. Sleight, at 257 Hunslet Road, Leeds.

MR. F. A. GOODWIN, pharmaceutical chemist, has purchased the business at 79 Mutley Plain, Plymouth, lately conducted by Messrs. Towan & Co.

MR. J. VINCE, chemist and druggist, Lancaster, has taken into partnership Mr. J. F. Barker, a former pupil, and the firm will henceforth be known as Vince & Barker.

THE retail business hitherto carried on by Messrs. Pritchards (Limited), at Cheadle, Manchester, has been acquired by Mr. Thomas Woodruff, pharmaceutical chemist, Withington.

MR. THOS. MACKENZIE, pharmaceutical chemist, lately principal of the Glasgow and West of Scotland School of Pharmacy, has taken over the old-established business of Mr. Allan, at 4 Church Street, Inverness.

MR. AUGUSTINE WORTS, who for the last thirty-five years has been in business at Harwich, has disposed of his pharmacy to Mr. Robert Woodward lately a dispenser with Messrs. Hooper & Co., Pall Mall East.

Legal Reports.

Saccharin Corporation (Limited) v. Fahlberg and others.

THIS is an action in the Chancery Division in which the plaintiff company claim, as against Dr. Fahlberg and Messrs. Wilson, Solaman & Co., that they are the assignees from the defendant company of certain patents which in 1893 the defendant Fahlberg assigned to the defendant company and of the patents for certain improvements since protected by patent. Some time ago an application was made by Fahlberg for discovery by means of interrogatories and for the production of documents by Fahlberg against his co-defendants, who are willing to make the assignments to the plaintiff company, and who consequently have put in no defence. The assignment by Fahlberg to the defendant company was for 50,000*l.*, and among other conditions it was stipulated that if the defendant company assigned the patents to a limited-liability company, they should require the new company to appoint him their consulting engineer and chemist for a period of ten years at a remuneration named, and this had not been done. Having heard counsel at great length on the application for interrogatories and the production of documents, Mr. Justice Stirling on Saturday gave judgment. He pointed out that at present Fahlberg made no counterclaim, and Fahlberg's allegations in his defence seemed to him to form a proper basis for a counterclaim against both the defendant company and the plaintiff company. To such a counterclaim he defendant company would be obliged to put in a defence, and the Court would then know clearly the issues raised. meantime, therefore, he would make no order on this application, but direct it to stand over, allowing the defendant Fahlberg—if so advised—to amend his pleadings, the form of the counterclaim to be first prepared and submitted to the Court. The question of costs would be reserved.

Saccharin Corporation v. Bratby & Hinchliffe.

In the Chancery Division of the High Court of Justice, on Wednesday, Mr. Justice North heard an application in the matter of the Saccharin Corporation (Limited), who seek to obtain an injunction to restrain Messrs. Bratby & Hinchliffe (limited) from infringing their patent in the manufacture of saccharin. Mr. Colefax appeared for the plaintiffs, and Lord Robert Cecil for the defendants.

Mr. Colefax asked his Lordship to direct the defendants to reply to certain interrogatories made to them for the purposes of the coming trial. Lord Robert Cecil opposed the application on the ground that the defendants were not bound to give the information that had been demanded. His Lordship allowed the application, but reserved the question of costs till the hearing of the action.

An Extraordinary Libel Case.

In the Court of Appeal, on October 29, before the Master of the Rolls and Lords Justices Chitty and Vaughan Williams, the case of Thomas Hubbuck & Sons (Limited) v. Wilkinson, Rywood & Clark (Limited), came on for hearing on an appeal of the defendants from an order of Mr. Justice Kennedy, who refused to strike out plaintiffs' statement of claim as being vexatious and frivolous.

Mr. Moulton, Q.C., in appearing for the appellants, said that the action was brought in respect of an alleged libel which, the plaintiffs contended, was calculated to disparage and injure their business. Both parties were paint-manufacturers, and the alleged libel was contained in a circular issued by the defendants, in which they detailed experiments which had been made with their white paint and that sold by the plaintiffs. These experiments were carried out by experts, and an opinion was pronounced in favour of the paint sold by the defendants, and which was put upon the market at a lower price than was that made by plaintiffs. Plaintiffs relied upon the statement that the defendants' paint was called "Stone's Bell Brand Genuine White Zinc Paint." It was said that the word "genuine" was intro-

duced for the indirect purpose of disparaging the plaintiffs' paint, and leading people to believe that it was inferior to that sold by the defendants, and that it was put upon the market at a price about double its value. Defendants were prepared to prove that the word "genuine" was, and had been for a long time, part of the name of the paint, and there was really nothing in the circular which gave the plaintiffs any cause of action.

Mr. Lawson Walton, Q.C., for the respondents, submitted that the matter was one for a jury to determine. The circular in question contained a distinct innuendo, and the plaintiffs were entitled to have an opportunity of establishing it before a jury.

After hearing further argument their Lordships reserved judgment.

Homocea Shares.

THE case of Bowden v. Homocea (Limited) was mentioned before Mr. Justice Kekewich, in the Chancery Division, on October 28. Mr. Lawrence, Q.C., said he had had a motion before the Vacation Judge asking for specific performance of an agreement to issue certain shares in Homocea (Limited) to the plaintiff. It was then arranged to take an order which should hang up matters until the trial. A summons for directions had been taken out, and he had now agreed with counsel appearing for the defendants to get the action set down at once, the statement of claim to be delivered before November 4.

Mr. Justice Kekewich: Very well.

Philip and Morris.

In the City of London Court, on October 28, before Deputy-Judge Pitt-Lewis, Q.C., the case of Bush v. Goldberg, which has been reported in these columns previously, was disposed of. Messrs. Bush & Co. (Limited), Artillery Lane, E.C., who had recovered judgment against Messrs. H. Goldberg & Co., 107 New Road, Whitechapel, E., for 9*l.* 6*s.* 6*d.* for essences supplied, had levied execution, and the defendants' goods were sold under an order of the Court. Then the defendants asked to have the whole proceedings set aside on the ground that the money was not due and that they knew nothing about the action until the bailiff of the Court seized the goods. The summons was served on Morris Goldberg, who was no relation of the defendants. Philip Goldberg said he was the real defendant, though he traded as H. Goldberg & Co., the H. being his wife's initial. The plaintiffs said the real defendant, Philip Goldberg, knew of the action, and therefore their proceedings were in order. When the case was last before the Court, the Deputy-Judge said he was satisfied that what had taken place was a collusion between Philip Goldberg and Morris Goldberg, who had had the summons. As the figures were said to be in dispute, the affair was referred to the Assistant-Registrar. That official now reported that the plaintiffs were entitled to recover. Mr. Markham, defendants' solicitor, hoped the award would not be made an award of Court, as the plaintiffs were now asking should be done. The right man had never been served with the original summons in the action. He would like to argue that as a point of law. The Deputy-Judge said there was no point of law in dispute. It was a juggle between the two Goldbergs. When one got the summons he said, "Oh, it is my namesake round the corner." When the other received it, he referred him back to the previous one. Mr. Markham said there was no doubt the wrong man was served with the summons. The Deputy-Judge: But by the connivance of the proper one. Mr. Markham said that it was a default summons which was issued. The Act of Parliament required it to be served personally. The Deputy-Judge: If I put my footman in front of me, and he is served with a writ intended for me, that is not service on me, you say? Mr. Markham: I say so. The Deputy-Judge: I cannot help you. You can appeal if you like. But I will not give any leave.

Cheques on Account.

In the City of London Court, on October 31, before Deputy-Judge G. Pitt-Lewis, Q.C., a question arose of some interest. Messrs. Lorenz & Co., bronze-powder manufacturers, Mincing

Lane, E.C., had sued Messrs. M. Rogers & Co., 145 Brecknock Road, for 4*l.* 18*s.* 11*d.* for bronze powder supplied. The plaintiffs had issued a default summons, but it had not been served upon the defendants. The defendants, hearing of the action, had paid the debt, but not the costs. The plaintiffs asked to be allowed the costs of the default summons, which afterwards had been exchanged for an ordinary summons. The Deputy-Judge was inclined to allow this, but the defendants said they had a reason to urge why the costs should not be allowed. They sent a cheque in settlement of all claims before the summons was issued. In spite of that fact the summons was taken out. The Deputy-Judge said if a cheque were sent to the plaintiffs, they had no right to keep it and then issue their summons. The plaintiffs' solicitor, however, said it had been held that if a creditor received a cheque, and he made it clear in giving a receipt that it was on account, he was entitled to retain it. The Deputy-Judge said he did not think it a fair thing to keep the cheque. He knew the plaintiffs were legally right in retaining the cheque, but the view he took of the matter was that they were morally wrong. They were acting, no doubt, strictly in accordance with the law on the subject; but, as he had a discretion in the matter of the costs, he intended to exercise it by disallowing the costs of the plaintiffs under the circumstances.

Rival Mineral-water Makers.

AT Wonford Petty Sessions, on October 28, Messrs J. Kerswell & T. Grafton, mineral-water manufacturers, and their foreman, John Way, all of St. Thomas, Exeter, were summoned for unlawfully and maliciously conspiring to damage certain bottles and syphons, the property of several other mineral-water makers in Exeter and St. Thomas; and with depriving these firms and others of the use and possession of their goods with intent to injure and impoverish the owners. The information was laid by the Secretary to the Bristol and District Bottle Exchange Association (Limited), and Mr. Charles Mathews, Q.C., counsel to the Treasury, prosecuted. The allegations against the defendants were that in several instances where mineral-water manufacturers had started in business in Exeter defendants had systematically adopted the practice of collecting the bottles and syphons of these rival firms and smashing them. Evidence was given of threats having been used by the defendants, and witnesses deposed to finding tons of broken bottles buried in a field belonging to one of the defendants, and to discovering a large number of bottles of other firms stored away in an empty house. The defence was that the bottles of the rival firms had inadvertently got mixed, and were broken by negligent and lazy workmen, for which defendants were not responsible. The case was adjourned until November 15.

Quinine-fumes.

AT the Shoreditch County Court, on October 28, James Turner, of 1A Stamford Terrace, Stamford Hill, a stonemason, sued Mr. T. Ruth, a quinine-manufacturer, of Finsbury Pavement and Stamford Hill, for 4*l.* 10*s.* damage done to furniture and some plants through the fumes arising from the manufacture of quinine.

Mr. Armitage, who appeared for the plaintiff, stated that four years ago defendant opened a factory some 630 yards from his client's premises. For some time no notice was taken of the nuisance, but it became so great that complaint was made to the defendant, who ignored the matter. So serious did the nuisance become, however, that the greater part of the plaintiff's drawing-room furniture was spoilt, and the plants in his window killed.

Judge French: Do you mean to say the fumes from this quinine occasioned that damage?

Mr. Armitage said there was no doubt about it.

The Judge: I have always understood, although I am not a chemist, that there are no fumes arising from the manufacture of quinine.

Mr. Armitage: We do not say exactly that it was the fumes from the quinine, but some acid used in its manufacture.

Plaintiff gave evidence bearing out his counsel's statement, and, answering the defendant, said he first complained to Mr. Ruth in 1896.

His Honour: Why have you kept this action hanging on so long?

Plaintiff (producing a large bundle of papers): Because, you see, I have been writing trying to get satisfaction, but I never could.

Defendant: We manufacture numerous things, but I never before heard of any damage or ill-effect arising from the fumes of quinine-manufacture.

Plaintiff said he knew vitriol went into the place by the ton, and that the defendant's men had been laid up through the fumes from it.

His Honour: What is the process of making this?

Defendant: It is bark precipitated, and the precipitate is simply crystallised.

The Judge: That would not occasion any fumes, would it? Defendant said no, and went on to state that his men had had no illness other than ordinary illness.

His Honour: How did you come to discover the fumes were doing damage?

The Plaintiff: I noticed one morning my flowers were dying and were much discoloured. I also saw the wind was blowing the smoke right into my place. I found the pictures, which once had gold-coloured frames, were the colour of mahogany, and a gold-plush snipe had turned a copper colour, the fender had rusted, and other articles had become discoloured.

The Judge: Have you ever noticed any smell from these fumes?

The Plaintiff: Yes, repeatedly. It was the cause of my complaint.

Hearn, formerly an engine-driver in the defendant's employ, said he knew from experience that the muriatic acid used in the chimney would occasion fumes, which would do all the damage plaintiff alleged had been done. The fumes laid him up repeatedly, and he was not well now. Sulphuric acid was also used in small quantities.

His Honour said he believed the plaintiff, and should give judgment for the full amount claimed, with costs.

Distributing St. Jacobs Oil Pamphlets.

AT Marylebone County Court, on Tuesday, before Judge Stonor, Henry Gowen, described as an advertisement-distributor, of 73 Artesian Road, Bayswater, London, W., sought to recover from Messrs. Charles A. Vogeler & Co., proprietors of "St. Jacobs oil," 45 Farringdon Road, London, E.C., the sum of 2*l.* 5*s.* as a week's wages in lieu of notice, and 1*l.* odd for railway expenses, and return of 2*l.* 7*s.* 6*d.* deposit.

The plaintiff said he had been employed by the defendants to superintend the distribution of pamphlets about various parts of the country. He had to travel from place to place, engaging gangs of men for the time being, and see that they put the pamphlets through the letter-boxes of the houses. When he had reached North Shields an employee of the defendants appeared upon the scene and discharged him without notice, alleging that he had allowed the pamphlets to be put through cracks in the doors, or thrown them down inside the houses. Cross-examined by one of the defendant company's clerks, the plaintiff admitted that previously to coming to the defendants he had been in the employment of Dr. Tibbles' Vi-cocoa people and was summarily discharged as unsuitable, but it was not for giving away five or six pamphlets at a time.

Robert Feetham, who said he was the defendants' chief inspector, testified that on visiting North Shields soon after the plaintiff had been sent there he found the pamphlets thrown all over the streets. The men were putting the pamphlets up by the doors, and children were following and gathering them up five or six at a time. He took the plaintiff and showed him the pamphlets lying about the streets, and put in houses which were unoccupied, and even in some not completely built.

The Judge: Were you sent to North Shields to look after this man?

Witness: I was going round the country looking after the other men, and received instructions to go on to North Shields to see how the plaintiff was doing his work.

The Judge: Were there pamphlets lying about in many of the streets?

Witness: In all the streets, sir.

The Judge: It appears that the plaintiff misconducted

himself in allowing several streets to be strewn with these advertisements, and I must find for the defendants. But I shall allow no costs for the witnesses.

The Irish Pharmacy Acts.

LIMITED COMPANIES AND THEIR APPRENTICES.

ON October 28, in the Queen's Bench Division, Dublin, before the Lord Chief Baron, Mr. Justice O'Brien, and Mr. Justice Andrews, the hearing was commenced of a case of the Queen at the instance of William Boulton Conyngham v. the Council of the Pharmaceutical Society of Ireland. The applicant, Mr. Conyngham, had applied to be admitted to the licence examination. The Council had refused to admit him, on the ground that he had not served a four years' apprenticeship to an individual pharmaceutical chemist, his apprenticeship having been in part to a limited-liability company, of which Messrs. Hayes, H. Conyngham and Robinson, together with four others, were members. On June 23 last, counsel for Mr. Conyngham obtained a conditional order for a writ of *mandamus* to compel the Council to admit him to the examination.

Mr. Joseph Day, with whom was Mr. John Gordon, Q.C., instructed by Messrs. Casey & Clay, now, on the part of the Council of the Society, showed cause against the conditional order. Counsel stated that Mr. Conyngham, the applicant, was in September, 1892, apprenticed to his father, Mr. Henry Conyngham, who is a member of the limited company. After having served nine months to him he was transferred as an apprentice to Mr. Hayes, another member of the company, and served with him for two years and two months up to August 31, 1895, after which his apprenticeship was again transferred to his father, whom he served for a further period of nine months. In April, 1897, Messrs. Hayes, Conyngham & Robinson became incorporated as a limited company; and the applicant served the balance of his term of apprenticeship with his father as a member of that company.

The Lord Chief Baron: What provision renders it necessary that an apprenticeship should be served? I want to see whether, if there is a duly licensed pharmaceutical chemist who is carrying on the business of another duly licensed pharmaceutical chemist in the shop of that other, an apprenticeship can be duly served to him. If it can I cannot see why the apprenticeship of this applicant cannot be treated as an apprenticeship served to Mr. Hayes.

Mr. Day: That is not the way in which it is put in the declaration.

Mr. Justice O'Brien: It was decided in this court that here there is a duly licensed pharmaceutical chemist in the service of a company he may receive an apprentice, and may exercise all the functions of a pharmaceutical chemist with freedom from penalties.

Mr. Day: It never went so far as apprenticeship. He can manage the business of a company. Counsel, continuing, said it was provided by Regulation 3 that "candidates for a licence who have not, previous to January 1, 1884, passed the Preliminary or equivalent examination shall be required to produce a statutory declaration signed by a pharmaceutical chemist, &c., stating that such candidate has served a *bona-fide* engagement for a term of four years, for two or more lesser terms, amounting in all to four years, as apprentice or assistant with and in the sole employment of such pharmaceutical chemist, or of a firm of legally qualified pharmaceutical chemists." The contention of the Council was that a limited company was not a "firm of legally qualified pharmaceutical chemists." In Cleland's case it was thrown out by counsel that that regulation was *ultra vires*, but that question was not then argued. He submitted that the regulation was not *ultra vires*, and that it was not competent now to the Court to entertain a question as to whether it was or not, inasmuch as the regulation had been duly approved by the Lord Lieutenant and Privy Council, and laid on the tables of both Houses of Parliament, and should therefore—in the words of a section of the Act—be deemed to be part of it.

The Lord Chief Baron: Are we not quashing convictions under fishery by-laws every day on the ground that the laws were *ultra vires*?

Mr. Justice O'Brien: I suppose the real object is to have the number of masters equal to the number of apprentices. Is it not a kind of trades-union business?

Mr. Day: No, it is not. The Society have been entrusted with the duty of seeing that no unqualified person dispenses drugs, or compounds prescriptions; and it is in the discharge of that duty that the Society are here. I may say with regard to this particular case of Mr. Boulton Conyngham that it is not a personal matter at all, for he could have easily qualified. Under Section 17 of the Act of 1875 every regulation which had been approved by the Privy Council and laid on the tables of Parliament was of the "same force as if it had been enacted in the Act." Counsel cited the judgments in the case of the Institute of Patent Agents v. Lockwood in support of his contention.

The Lord Chief Baron: That does not seem to touch the point. Must you not show that the regulation was made in pursuance of the Act?

Mr. Justice O'Brien: The idea seems to be that the acquiescence of the House of Commons is equivalent to a statute.

Mr. Day submitted that the regulation in question was not *ultra vires*. Section 16 of the Act of 1875 gave the Council power to make "regulations with respect to the matters following: (1) the meetings and other proceedings of said Council; (2) the examination of persons desirous of being registered as pharmaceutical chemists under this Act." His argument was that clause 2 gave the power of stating what persons they would admit to the examination. Clause 8 of the Section gave them power to make regulations "generally for all such other matters as may be necessary for the due execution of this Act." That included a power to take care that persons were properly qualified whether by examination or otherwise. Section 22 enacted that "every person who shall be duly examined in accordance with the provisions of this Act, and who shall be certified by the examiners to be qualified to act as a pharmaceutical chemist . . . shall upon giving the registrar such reasonable proof thereof as may be required under any regulations made by the Council in that behalf, and on payment of the proper fees and charges be entitled to be registered as a pharmaceutical chemist." The words "reasonable proof," counsel submitted, referred to the qualification of the candidate and not merely to the certificate. He relied on that Section as proving that, in addition to the passing of the examination, the Council had a right to demand something further from the candidate. Section 23 of the Amendment Act of 1890 provided that it and the Act of 1875 should be read together and construed as one Act. Section 10 of the Act of 1890 provided that any person who shall have served an apprenticeship of four years with a pharmaceutical chemist, a licentiate apothecary, a registered chemist and druggist, or a registered druggist, shall be entitled to present himself for examination under this Act, and shall be entitled on passing his examination to be registered as a registered druggist under this Act, and every person who shall have served such apprenticeship to a registered chemist and druggist, or a registered druggist not being a pharmaceutical chemist, and who shall comply with the regulations of the Society in force for the time being, and in addition shall have served an assistantship of two years to either a pharmaceutical chemist or a licentiate of the Apothecaries' Hall keeping open shop, shall be entitled to present himself for examination under the principal Act as a pharmaceutical chemist, and shall be entitled on passing his examination to be registered as a pharmaceutical chemist.

Mr. Justice O'Brien: The first part of that Section seems to apply to intended registration, not as a pharmaceutical chemist, but as a registered druggist.

Mr. Day contended that the Council had power to make a regulation requiring something more than the certificate of the examiners. But assuming that the regulation in question was *ultra vires* he submitted that the Court had no power to take notice of that. The question remained, Had this gentleman served a four years' engagement to a "pharmaceutical chemist" or a "firm of legally qualified pharmaceutical chemists"? He contended that a company registered under the Companies Act could not be considered to be a firm of "legally qualified pharmaceutical chemists."

Mr. Justice O'Brien: Even though they are all actually qualified?

Mr. Day: Even though they are all actually qualified. The word "firm" clearly does not include a company.

The Lord Chief Baron: What about an ordinary partnership of seven persons? Would that be a "firm"?

Mr. Day: Not if registered or incorporated. A firm contemplated individuals; but a body corporate was a legal entity having no physical existence. In a partnership every member was the agent of the other partners, but that did not apply to a company at all.

Mr. Ronan, Q.C., with whom was Mr. Matheson, Q.C., and Mr. Blood, instructed by Messrs. A. Robinson & Son, addressed the Court on the part of the applicant, and in support of the conditional order, and submitted that the regulation was *ultra vires*, but that even if it were not his client was within it. What was the regulation? It required a statutory declaration signed by a pharmaceutical chemist that the candidate had served a *bona-fide* engagement for a term of four years as apprentice or assistant in the sole employment of such pharmaceutical chemist, or had served a *bona-fide* engagement as assistant in the sole employment of a firm of legally-qualified pharmaceutical chemists, of which firm the aforesaid pharmaceutical chemist is a "member." The word was "member," not "partner"; and the Court had no right to cut down the meaning of the word "firm" so as to exclude from it a limited company. He submitted that an association of persons registered under the Companies Acts was a "firm" within the meaning of the language of the regulation. What was provided by the articles of association of the limited company in question? One enacted that no person who was not a qualified pharmaceutical chemist should be a member of it; and there were other provisions to the effect that shares of bankrupt or deceased members should not get into the hands of unqualified persons. Why should the metaphysics of company-law be imported into so plain a regulation? What difference was there between a registered partnership of pharmaceutical chemists and an unregistered partnership of the same persons? If the members of this company had not filed a document in the Custom House the apprenticeship in question would have been perfectly good. In Cleland's case the partnership did not contain a single pharmaceutical chemist. If they were to take in persons who were not pharmaceutical chemists, the company in question would lose their status at once. But they had not done it.

Mr. Justice Andrews: Suppose you took in one person who was not a pharmaceutical chemist, could you go on acting?

Mr. Ronan: The law as to that was settled by Boyd's case, which decides that the prohibition against carrying on this business by unqualified persons does not apply to companies. Corporations, in the language of Mr. Justice Gibson, although unqualified are not disqualified. A corporation can do things that an individual cannot.

The Lord Chief Baron: Can lawfully do it, or is not liable to penalties? I think that is another thing altogether.

Mr. Ronan, Q.C., said a company could sell poisons through a qualified assistant. Counsel further submitted that the regulation relied upon by the Council was repugnant to the provisions of the Irish Act of 1875. This provision about apprenticeship was wholly in the teeth of that statute. Where the rule was antagonistic to the statute the rule must give way. Section 21 of that Act said that "all persons desirous of being registered as pharmaceutical chemists under this Act may at any such examination present themselves for examination." The rule said that no person should be entitled to do it unless he had served a four-years' apprenticeship. Was any person entitled to present himself for examination the day after the Act had passed, or were these people entitled to suspend the operation of the Act for four years? And if for four years, why not for twenty? What was the clause under which it was suggested by Mr. Day that this body had power to suspend the operation of the statute for four years? Section 16 of the Act gave the Council power to "make regulations with respect to the matters following:— . . . (2) The examination of persons desirous of being registered as pharmaceutical chemists under this Act"; and clause 8 entitled them to make regulations "generally for all such other matters as may be necessary for the due execution of this Act." He submitted that "due execution" meant that they should

at once admit all who presented themselves. Section 10 of the Amendment Act of 1890, which required an "apprenticeship of four years with a pharmaceutical chemist," only applied to chemists and druggists who wanted to become pharmaceutical chemists. The object of that Act was to establish a class of chemists and druggists as distinguished from pharmaceutical chemists; it did not deal with the status of the outsider—"the man in the street"—who wanted to become a pharmaceutical chemist. There was nothing in that Act which cut down the right of individuals of the general public to present themselves for examination as pharmaceutical chemists.

The learned counsel had not finished his argument when the case was adjourned to Tuesday, November 1.

The arguments were resumed on Tuesday last.

Mr. Matheson, Q.C., followed on the same side with Mr. Ronan, Q.C., and submitted that, assuming that the regulation in question was valid and binding, there had been a compliance with it on the part of the applicant. The contention on his part was that the word "firm" was a general term applicable to any association consisting of more than one pharmaceutical chemist. The company in the present case consisted of gentlemen all of whom were pharmaceutical chemists, and was consequently entirely different from those of the company in Cleland's case, in which there was only one pharmaceutical chemist amongst a large company. As to the question of *ultra vires*, the section of the Act of 1875 which gave the Council power to make regulations specified the matters to which the regulations were to relate under seven different heads; but there was no power given to the Council to restrict the class of persons "desirous of being examined" to persons who had fulfilled a four-years term, or any other term, of apprenticeship.

Mr. Gordon, Q.C., replied on the part of the Council, and urged that the word "firm" had no meaning in English law apart from the persons composing it, whereas an incorporated company, of seven or more persons, was a legal entity, not depending for its existence on the persons composing it at all. Again, each member of an ordinary partnership could bind the others, but that was not true of the members of an incorporated company at all. He did not believe that any pharmaceutical chemist in Ireland desired to get rid of the system of apprenticeship.

Mr. Ronan: I am instructed that there are.

The Lord Chief Baron: If I were framing a code I certainly would insist on apprenticeship; but I am not framing a code.

Mr. Gordon said these regulations had been in existence for fourteen years. They had been discussed in that court, and three of the Judges said they could not be set aside.

At the rising of the Court the arguments were adjourned to Wednesday, November 2, when

Mr. Gordon, Q.C., continued his argument, and the Court reserved judgment.

Bankruptcies and Failures.

Re JOHN ARCHER BREW, Summer-house Inn, Gospel End, Sedgley, formerly Chemist and Druggist.

THE public examination of this bankrupt was held at Dudley County Court on October 27, before Mr. Registrar Kettle. The statement of affairs showed liabilities 908*l.*, and deficiencies 613*l.* 10*s.* 5*d.* Bankrupt attributed his failure to losses on horse-breeding and various losses in connection with his lease of the Summer-house Inn. In reply to the Official Receiver debtor stated that twenty years ago he started business as a chemist in Brighton. The business was left to him by his father, and was worth 2,000*l.*, but he had to pay his sisters 700*l.* for the value of stock and fixtures. He carried on the business for two years, but, owing to severe illness, he had to give it up, and the business was sold. He afterwards carried on a mineral-water business in the same town, which he started with 200*l.* borrowed from some friends. At the end of eighteen months he compounded with his creditors, paying them 4*s.* 6*d.* in the *l.* He then took a situation in Aberdeen, was afterwards for a short time in Edinburgh, and then he went to London, where he remained three years. His next move was to

Malvern, where he managed a business; he was, in fact, "a sort of partner, and picked up half the profits." He again got into debt to the extent of 100*l.*, and left Malvern after being there five years. He next went into the hotel business, first at Sutton Coldfield and afterwards at Sedgley, where he developed into a horse-breeder, with disastrous results in each case.

Re WM. THOMAS COOMBS, 4 Neville Street, Canton, Cardiff, Chemist and Druggist.

THE liabilities in this failure amount to 330*l.* 13*s.* 10*d.*; and assets, consisting of stock-in-trade (cost 80*l.*), 60*l.*; trade-fixtures, fittings, &c., 100*l.*; furniture, 15*l.*; other property, 1*l.* 5*s.*; book-debts (good), 1*l.* 17*s.* 1*d.*, (doubtful and bad), 3*l.* 2*s.* 3*d.*, estimated to produce 18*s.*; making 178*l.* 10*s.* 1*d.*, less 38*l.* for preferential claims, leaving net assets 140*l.* 10*s.* 1*d.* The following are creditors:—

	£ s. d.
Barron, Harveys & Co., London	... 38 8 7
Coombs, C. J., London	... 134 13 1
Ferris & Co., Bristol	... 22 9 2
Holman, F. W., Cardiff	... 31 5 0
Maw, S., Son & Thompson, London	... 17 12 10
Bankers, Cardiff	... 11 4 5

Preferential Creditor for Rent.

Davies, D. E., Cardiff	... 37 0 0

e Jno. HOY, 22 Bridge Street, Leeds, Chemist and Druggist.

THE liabilities in this recent failure are stated to be 4*l.* 8*s.*; and the assets consist of stock-in-trade, 30*l.*; trade-fixtures, fittings, utensils, &c., 100*l.*; together 130*l.*, from which 7*l.* 17*s.* has to be deducted for preferential claims, which leaves net assets 122*l.* 3*s.* The following are editors:—

	£ s. d.
Brewster, W., Leeds	... 30 0 0
Fraes, S., Leeds	... 12 0 0
Ganderton Brothers, Hull	... 40 0 0
Sissons, Brothers & Co., Hull	... 22 0 0
Bankers, Leeds	... 31 0 0

ARTHUR ERNEST ATTRIDE, late of 136 Stamford Street S.E., Chemist.

A RECEIVING order having been made in this case upon a creditor's petition, the debtor attended for public examination on Wednesday, before Mr. Registrar Giffard, at the London Bankruptcy Court. The statement showed liabilities 1*l.* 9*s.* 6*d.*, of which 82*l.* 9*s.* 6*d.* were expected to rank for dividend, against assets estimated to produce 238*l.* Mr. E. Grey attended as Assistant Official Receiver, and Mr. F. Willis appeared for the debtor. In the course of his evidence, the debtor stated that in May, 1897, he opened a chemist's shop at 136 Stamford Street, S.E., and carried it (under management) under the style of the "Red Cross Drug-stores" until May last, when, in his absence, the landlord took possession for rent alleged to be due. Since June last he had been without regular occupation. He ascribed his failure mainly to loss in trading, to bad debts, to law costs, also to betting losses. After the debtor had given evidence with reference to another business in which he had been interested, His Honour ordered the examination to be concluded.

FREDERICK JOHN WIMBLE, Dunster House, Mincing Lane, E.C., Colonial Broker.

HIS bankrupt attended the London Bankruptcy Court for his public examination on Tuesday. According to Mr. Pope, Assistant Receiver, he said that in 1893, when carrying on a similar business under the name of Cittenden, Harker & Wimble, at 19 Mincing Lane, he made an arrangement with his creditors under which they received a lump sum down, and were eventually paid their claims in full. For some years afterwards he assisted his brother, a colonial broker, who traded at 2 Mincing Lane, under the style of C. Wimble & Co. He was never a partner in that firm. Asked regarding his life

policies and household furniture, he said they had been disposed of to meet Stock Exchange losses and the claims of the money-lenders. He had borrowed money for the purposes of the business, and had paid as much as 40 per cent. interest. Having regard to the fact that with the aid of those advances he had been enabled to make in the past 100*l.* or 120*l.* a week, he thought it unnecessary to question too closely the rate of interest charged. In January, 1897, he started again on his own account at Dunster House. At that time he owed his wife 1,190*l.*, and 100*l.* to a money-lender. As the result of his trading he increased his then deficiency of 1,290*l.* to 7,778*l.* 18*s.* 6*d.*, as now disclosed by the accounts. The whole of that loss was made in April, 1898, and represented differences on produce for June, July, and August deliveries, the accounts in regard to which had been closed against him. In addition to the usual commission business he had bought and sold colonial produce on his own account, and it was upon that merchants' business that the losses arose. During the first six months of 1897 he made a net profit of 500*l.*, but the subsequent trading was not a success. He chiefly attributed his appearance at the Court to the explosion of the *Maine*, which brought prices down some 20 per cent. in three days, and to the Spanish-American war that followed.

The examination was concluded.

Re FRANCIS TUCKER, late of 110 Falcon Road, Battersea, Chemist.

THE adjourned meeting of creditors under this failure was held on Thursday, before Mr. Wildy, Official Receiver, at the London Bankruptcy Court.

The Chairman reported that the debtor had not surrendered, nor had he filed any statement of affairs. The only proof lodged was by Mr. R. T. Leyson, of Sketty, near Swansea, the petitioning creditor, who claimed 145*l.* 19*s.* 2*d.*, and who desired the appointment of himself to the post of trustee. In the absence of a quorum, no resolution could be passed at that meeting, which would not be further adjourned, but the petitioning creditor's solicitor might under the Act write to the Board of Trade and ask for his client's nominee to be appointed as trustee, and doubtless Mr. Leyson's wishes would be carried into effect.

Re ARCHIBALD C. MELDRUM, sole partner of the firm of Messrs. Meldrum & Co., Manufacturing Chemists.

THIS bankrupt was examined at the Paisley Sheriff Court on Wednesday. He said he was 27 years of age, and until last year had been manager of a borax-works in Stockport. In November last he bought the Elderslie Mill for 1,450*l.*, and contracted for machinery to the value of about 1,200*l.* He had no assets, but hoped to float a company to purchase the works from him, and to make him managing director. The flotation, however, was not successful, and his estate now showed liabilities 3,869*l.*, about 1,600*l.* of which was preferably secured; and assets, consisting of mill and plant, 2,155*l.*

Deeds of Arrangement.

*Flintoff, James William, 35 Whalley Range, Blackburn, drug-store proprietor. Trustee, Edward Waterworth, 36 Richmond Terrace, Blackburn, accountant. Dated, October 19; filed, October 25. Liabilities unsecured, 138*l.* 4*s.* 8*d.*; estimated net assets, 60*l.* The following are scheduled as creditors:—*

	£ s. d.
Flintoff, Ann J., Blackburn	... 100 0 0
Gifford, R. Lord, Blackburn	... 11 0 0
Hirst, Brooke & Hirst (Limited), Leeds	... 12 0 0

*Symns, William Cuthbert, trading as "W. & R. Symns," 64 St. John Street, Liverpool, wholesale drayalter. Trustee, William Denton, 3 Crosshall Street, Liverpool, chartered accountant. Dated, October 14; filed, October 21. Secured creditors, 17*l.* 7*s.* 6*d.*; liabilities unsecured, 145*l.* 14*s.* 9*d.*; estimated net assets, 58*l.* 12*s.* 6*d.* The following are scheduled as creditors:—*

	£ s. d.
Baker & Co., Cork	... 17 0 0
Rylands & Sons (Limited), Liverpool	... 13 0 0
Watson, W. H., & Co., Salford	... 10 0 0
Williams & Co., Liverpool	... 10 0 0

Davis, Thomas, trading as "George Davis," Charnley Works, Charnley Street, and 138 Bury New Road, Whitefield, near Manchester, mineral-water manufacturer. Trustee, Harold Mather, 10 Acresfield, Bolton, chartered accountant. Dated, October 22; filed, October 23. Liabilities unsecured, £1,077*l.* 4*s.* 11*d.*; estimated net assets, 787*l.* The following are scheduled as creditors:—

	£	s.	d.
Aston, J., & Co., Salford	10 0 0
Bleackley, J., Whitefield	30 0 0
Brunner, E., Liverpool	66 0 0
Burgess, F., Whitefield	25 0 0
Crompton Brothers, Manchester	13 0 0
Dawson, J., Whitefield (rent)	18 0 0
Duckworth & Co., Manchester	10 0 0
Hampson, R., Unsworth	459 0 0
Hampson, W., Whitefield	25 0 0
Johnson, Mrs. Zillah, Pendleton	105 0 0
Kay & Co., Bolton	18 0 0
Marsh, Mrs., Prestwich	41 0 0
Nall, Jabez, & Co., Penistone	20 0 0
Peak, A., Radcliffe	13 0 0
Price, Sons & Co., Bristol	12 0 0
Redford, W. G., Whitefield	13 0 0
Scholes, P., Radcliffe	19 0 0
Street, J. F., Whitefield	12 0 0
Bankers' claims	96 0 0

Gazette.

PARTNERSHIPS DISSOLVED.

Oliver, F., Charnley, J. L., and Harwood, W., under the style of Charnley, Oliver & Harwood, Blackburn, soap-manufacturers; so far as regards F. Oliver.

Towse, A. W., and Efford, T., under the style of The London Photographic Supply Company, Borough, S.E., manufacturers of and wholesale dealers in photographic and lantern apparatus and materials.

THE BANKRUPTCY ACTS, 1883 AND 1890.

ADJUDICATIONS.

Cook, Charles, Shipley, grocer and dealer in drugs.

Laws, John Joseph, Greyhound Lane, Streatham Common, S.W., chemist and druggist.

Scotch Bankrupts.

Meldrum & Co., Elderslie Mills, Elderslie, by Johnstone, manufacturing chemists, and Archibald Cairy Meldrum, manufacturing chemist, there, the sole partner of said firm, as such partner, and as an individual, will be examined in the Sheriff Courthouse, Paisley, November 2, at 12.30 o'clock. Creditors meet in the office of Messrs. Brown, Fleming & Murray, chartered accountants, 163 West George Street, Glasgow, November 14, at 2 o'clock.

Wills of Deceased Chemists.

RAYNOR.—The will of Mr. Alfred Raynor, chemist and druggist, 52 Sandringham Street, Kingston-upon-Hull, who died on May 18, 1897, has been proved by Mrs. Amine Raynor, widow and sole executrix of the testator, whose personality was sworn at 402*l.* 6*s.* 2*d.*

ROWAND.—The will of the late Mr. Robert Rowand, wholesale druggist, Vauxhall Rd., Liverpool, has been proved by Mr. Richard Stopforth and Mr. Frederick Chambers, the executors. The testator's personality was sworn at 3,675*l.* 12*s.* 7*d.*

SARSFIELD.—The late Mr. William Sarsfield, pharmaceutical chemist, Durham, having died intestate, letters of administration to his estate have been granted to his widow, Mrs. E. H. Sarsfield, by whom the testator's personality was sworn at 6,348*l.* 12*s.* 11*d.*

THROSELL.—The late Mr. John Throssell, chemist and druggist, Hitchin, having died intestate, letters of administration to his estate have been granted to Miss Margaret Throssell, as next-of-kin to the deceased, whose personality was sworn at 5,158*l.* 17*s.* 11*d.*

The Brewers' Exhibition.

THE twentieth annual Brewers' Exhibition opened on October 29 at the Agricultural Hall, Illington, N., and remains open till November 5. The Exhibition was by no means perfect on the opening day, but on Monday most of the stalls were ready to receive visitors. The hall is well filled, and presents a gay show, but the aerated-water machinery is not in nearly such strong evidence as it used to be in the earlier years of the Exhibition. There are still a good many exhibits of accessories to the mineral-water trade, and we shall notice some of the miscellaneous articles; but it cannot be doubted that, at this Exhibition at least, alcohol seems to be encroaching on the province of carbonic-acid gas.

Idris & Co. have one of the best stalls in the Exhibition. One part is devoted to showing the different qualities of their English-made syphons. Sections of the syphon-top make the internal construction apparent. The glass tubing which this firm make for conveying syrups through is an advance on the metal tubing often employed. The syrup can be kept free from contact with metal at every stage of its progress in aerated-water factories where this tubing is used. The other portion of the stand consisted of two rooms, where visitors were received, and in one the Royal warrant which the firm hold was displayed.

Fenestre, Cadisch & Co. have an attractive syphon display. A small upright case is filled with well-finished syphons in various shades, the productions of a Paris firm for whom the exhibitors are agents. Among the most attractive are a ribbed syphon of an absinthe colour with a gilt top, a green one beautifully engraved, and one representing a spotted vase. A dark-blue syphon, engraved with Japanese characters in gold, is for a customer in Japan. The characters, we were told, are the customer's name and address, and we were invited to make what use of the information we pleased.

Among the sellers of adjuncts to the aerated-water trade may be named

The Saccharin Corporation (Limited), who are still proclaiming the advantages of saccharin in place of sugar. Enormous quantities of this sweetener, they state, are annually used in "the trade" in place of sugar, alcohol fermentation is effectually held in check, and a saving in price over sugar effected. Four and a half pounds saccharin are reckoned to be equivalent to 1 ton of sugar or 14 gr. to 1 lb. Syrup can be made from saccharin alone, of course, but in actual practice it is commonly made of both saccharin and sugar, and if more body is desired liquid glucose is added. Saccharin is also brought before visitors by the Anglo-Continental Chemical Works (Limited), who also show among other new goods encasin, an ammonia compound of casein, which is used as a food for invalids and infants and those suffering from wasting diseases; and Dr. Majert's migrol, a chemical given in 4-gr. doses for migraine and headache, and which is said to be absolutely innocuous. Guaiacetin is a curative chemical for diseases of the lungs and loss of appetite. Saccharin and guaiacetin are supplied in tablet form as well. A special show by this company is a display of Abrolis water. The exhibit is a striking one, and is enlivened by framed pictures of the Abrolis springs.

The London Essence Company have the same attractive stand which was conspicuous at the Confectioners' Exhibition, but with a complete change of goods. The essences shown are especially adapted for the mineral-water business, and the Winchester quarts of them look very prettily amidst the greenery with which the stand is decorated. Among the essences which drew our special attention were those of ginger-wine, of cordial ginger-beer, of lime-squash and of lemon-squash. Samples of aerated beverages, compounded with these essences, can be tasted at the stall.

Clayton & Jowett (Limited) are also showing fruit essences, oils, and colourings. "Zolakone" and "Rabbie's zain" (Rabbie's ain) are two "new essences" for producing aerated water. "Kepanite" is a preservative, and is said to subdue any tendency to over-fermentation.

The Manchester Chemical Company put forward the "liquid tartaric acid," which appears to be a solution

tartaric acid and phosphoric acid, 1 oz. by measure being equivalent to 1 czt. weight of tauric acid.

THE WINE MEN

are, of course, active, and their exhibits are amongst the most attractive.

Beaufoy & Co. have a long stall on which are displayed specimens of their products, and behind the stall a tasting-room, where the attendant explained their virtues. Beaufoy's was established as long ago as 1730 for the manufacture of malt-vinegar, and they added the manufacture of British wines later on, and speedily built up a good reputation for their articles. It need not be added that their reputation has grown with years, and is abundantly maintained. They have latterly added some of the medicinal wines, such as coca and quinine, to their repertory.

Stephen Smith & Co. (Limited) have, as usual, located Hall's wine, "Keystone" beef-wine, and kindred specialities in very tasteful and comfortable quarters. The pleasing young lady (by Seymour) still beams down on the wayfarer, and the gentleman in charge leaves nobody an excuse for being unable to understand the merits of Hall's wine, for booklets are printed in Hindustani, Chinese, Spanish, German, French, and English, so that he who runs may read if he can.

Holloway's Wine Company (Limited) is one of the first shows to catch the visitor's eye on entering. The firm are registering two words as distinctive names for their two best-known wines. The coca-wine is to be designated "Vinervo," and the meat-and-malt wine "Vinoires."

Bowen & McKechnie show St. Raphaël quinquina tonic-wine, which is said to be growing in favour with the medical profession.

CO₂

"We are still going ahead," said Mr. Steinem at Barrett & Eler's stall, "and our new factory has exceeded even our expectations. We are now turning out carbonic-acid gas at the rate of 8 to 9 tons in twenty-four hours." He had on view a cylinder of the gas, and was showing its purity by means of a gas-testing apparatus. This practical exposition seemed of much interest to the visitors.

The Carbonic-acid Gas Company had some dishes of solid carbonic acid on their stall when our reporters were there, and this also attracted considerable attention. The attendants were busy pointing out the advantages of the use of liquid carbonic-acid gas over that generated by oil of vitriol from whiting by reason of economy of space and cleanliness. The cold created during the expansion of the gas is found to be advantageous in enabling the bottler to turn out his soda-water better at a full 100 lbs. per square inch pressure in the hot days of summer.

FILTERS.

The Berkefeld Filter Company (Limited) were busy demonstrating the superiority of their filters; the simplicity with which they are cleaned by rubbing with a piece of loofah is very striking. Some of the larger sizes, for the use of brewers and aerated-water makers, are on show, as well as the smaller and more ornamental kinds adapted for ordinary purposes.

A. Haacke & Co. attracted attention by a show of twelve qualities of kiëselguhr. This firm use kiëselguhr-meal, under the name of "Fossil," as a non-conductor for steam-pipes and boiler-coverings. The infusorial earth is put to a surprising number of uses in the arts, in addition to the uses it is put to by chemists for tooth-powders and filtering. It is adapted for packing safes and ice-boxes, and in the manufacture of soap, paper, gutta-percha, and sealing-wax.

SCIENTIFIC APPARATUS.

Mr. J. J. Hicks's exhibit consists of the various scientific apparatus required by brewers and maltsters. Thermometers for taking the temperature in the mash and fermenting tuns and malt-kilns have each special features; the one for the fermenting-tun has an arrangement by which the face-index is freed from froth so that it can be easily read. A thermometer for use in a cask-sterilising room is shown, which rings an alarm when the temperature rises above a certain point, and thus gives warning if the heat is too great and in danger of burning the casks. Hicks's new hydrometer has the foot made in the form of a

brass crosses to prevent the instrument rolling off the table, and also to act as a stand when not in use.

Dring & Fage also show scientific instruments. They make hydrometers in silver, subsequently gilded, and claim that these far outlast brass ones, and even when inaccurate from wear are worth something as old silver.

Jos. Long is another exhibitor of saccharometers, thermometers, and hydrometers, as well as of many handy tools for the use of bottlers.

The Indian Rubber, Gutta-percha, and Telegraph Works Company (Limited) show all sorts of indiarubber goods, including hot-water bottles and tubing. Their special *raisin d'itre* at this Exhibition was gutta-percha utensils—bowls, jugs, and funnels—for containing corrosive acids, and a set of the fluor-acid bottles.

MISCELLANEOUS.

A large exhibit is made by **G. H. Gledhill & Sons (Limited)**, of check-till fame. Besides these familiar articles a few novelties are shown in bottle-washing and automatic rinsing-machines. "Soko," a preparation for cleaning bottles, is being pushed, as well as a new spiral "wing" brush specially designed for washing out bottles.

C. H. Glover & Co. (Limited) have a bewildering array of mineral-water van boxes, cases, and crates, as well as an assortment of the neat and well-made parcel-post boxes which they are noted for.

Icinglass, both crude and manufactured, is on view at the stall of **Herring, Giles & Co.** The original bladders (of which there are fifty different varieties) and the different stages of preparation and different grade strips when prepared are here shown. A curiosity is a circular sheet of crude vegetable-icinglass obtained from China. The source of this substance is unknown in this country, and no reliable information regarding it can be obtained.

E. Thompson & Co., too, have an instructive show of icinglass and finings. The different varieties of icinglass are shown in the natural state and in process of manufacture. Long ribbons of icinglass, produced by rolling with tremendous pressure, and of the thickness of gold-beaters' skin, is the stage to which the icinglass arrives before cutting the best kinds.

S. Clark & Co. made a warm spot of one side of the Gallery with their "syphon" stoves. No. 20 is a new design; it is of iron, artistically enamelled to represent tiles, and has a cheerful appearance.

Sir Walter Scott was watching over the interests of the **St. Ronan's Well and Mineral-water Company**, and seemed to wink benignantly from his pedestal, as the representative of the company dilated upon the merits of the water with whisky to appreciative hearers.

The Sallyeo Company, too, had a tasteful array of their popular table-water.

The Crown Cork Company (Limited) make a cork which consists of a disc of tin lined with cork washer, and the bottle on which it is to be used has a specially made mouth with a groove round the top. Stoppering is effected by squeezing the tin rim of the cork into the groove of the bottle, and for doing this several patterns of machines are supplied for both hand and power use.

Measuring-taps.—Senior's self-measuring tap is a very simple affair, capable of very accurate adjustment, and Soom's self-measuring tap registers the quantity withdrawn. Although primarily intended for use in hotel-bars, there should be an opening for their use in the drug-trade. Bottle-washing apparatus forms the chief feature of the exhibits of D. G. Binnington, T. Hill, and J. P. Jackson. The latter firm have adopted the water-motor as the driving-power for some of their machines, and show a simple capsuling-machine. A good filling-machine of uncomplicated construction, and which can be made for any size bottle, we figure

The British Bundy Company show their "time-recorders," which, although not new, are coming much into use for checking the entrance and exit of workmen in factories, being cheaper than the human time-checker, and in some cases more reliable. Each workman has a separate numbered key which he inserts in a keyhole beneath the clock, raising or lowering a lever according to whether he is entering or leaving the premises, the key in the meantime printing its number and the exact time on a band of paper.

Doulton & Co. show enamelled stoneware. Ginger-beer

bottles, toby jugs and loving-cups are there in great variety the lettering on the ginger-beer bottles being obtainable in either black or blue. The acid-proof vessels, well known to chemical manufacturers, are also shown.

George Skey & Co., James Stiff & Sons, and Price, Sons & Co. have exhibits somewhat similar.

J. Deaton & Sons show a useful bottle-case for wine-bottles. The case is of brown paper lined with wood-shaving, and has string attached, so that all one has to do is to slip the bottle in place, fold the ends and tie the string, and the customer may be carrying a packet of cotton-wool for all the outside public might know.

Wm. Fletcher shows an ingenious labelling-machine by which bottles can be labelled with great rapidity. A treadle-action pastes the edges of the label and fixes it on the bottle, and this it does in a perfectly cleanly way.

TOILET-TEMPTATIONS.

Vinolia is to be found in one of the galleries. Needless to say, the stand is in excellent taste and most attractive. Its magnetic influence is apparent by the number of young men and maidens who cluster round it.

A perfume-stand in strict keeping with the character of its surroundings is that of the **Rosmarine Manufacturing Company**. The perfumes are put up in bottles of distinctive shapes and are arranged in four pyramids—miniature specimens of Bass's ale, Scotch whisky, Johannis, and stone ginger-beer bottles. Wallflower-perfume is the firm's special line, and petal-dust, a strongly-perfumed combination sachet-powder and moth-preventer.

BEEF-PREPAREATIONS AND THE LIKE.

Bovril had a handsome stall in the centre of the hall from which tasting-samples are being freely dispensed. Vimbos is in the gallery, and here attendants were likewise handing out tiny cups of their preparation for visitors to taste.

Brand & Co. (Limited) have a corner stand flanked with monster bottles of "A 1" sauce and huge tins of essence of beef.

Fromms Extract Company have a nice little alcove in the arcade entrance, and Fromm's soups may be partaken of behind green plush hangings and in the midst of a multitude of palms and ferns.

Carnose is a new yeast-extract. It is in the form of a port-wine coloured jelly with a flavour of malt, and is prepared for use in a similar way to beef-tea from extract. We shall have something more to say about it next week.

Johnson & Hooper's exhibit was attracting admiring crowds by reason of the brilliance of their non-deposit bottled beer, and here the "Edme" malt-extract is exhibited.

CLEANSERS.

"Cleanite" is a solution (of some caustic alkali probably) for removing incrustations and dirt from beer and spirit pipes, and "Cleansine," which is stated to be "neither an acid, an alkali, nor a chemical," is a thick milky-white fluid for cleaning carpets, practical demonstrations of its properties being given. "Melosine," made by the Cleansine Company, is a thick pinky liquid perfumed with bergamot, which is principally for use, the Cleansine young man stated, when travelling, and when soap and water are not easily attainable.

One of our representatives who went to the show had the audacity to send in the following as his report of his visit:—

Up Islington—the merrie-way,
At the Hall of Agriculture,
The banners wave and the trumpets bray,
And red-faced strangers jolt yer;
Inquired we then of well-fed men
In heavy-weight condition,
What meant this blare, this gay fanfare?
Surprised, they shout, with wrathful stare,
"It's the 'Brewers' Exhibition.'"

So in we went with the bustling throng,
And looked around in wonder,
And the first to hail was our old friend "Fromm"
(From his extract he won't sunder);

And just in line Hall's coca-wine
We found, with Melrose whisky,
And Quinqua was not so far
From far-famed Beaufoy's vinegar,
And drinks which make you frisky.

With Bovril and with essence (Brand's)
We drowned our melancholia,
And from Vimbos', Idris', Edme's hands,
We passed on to Vinolia.
We longed to linger and admire,
But found that time was fleeting,
And CO₂ gave kind adieu,
As we rushed forth sad from friends we knew,
And waved our parting greeting.

Chemists on Councils.

THE following chemists were among the councillors elected at the Municipal elections on November 1:—

- Mr. J. Benjamin, Bath, re-elected unopposed.
- Mr. Jas. Law, Blackburn.
- Mr. J. Lanose, Blackpool, returned for the first time.
- Mr. Wm. Bouchier, managing-director of Eastover Stores (Limited), Bridgwater, re-elected unopposed.
- Mr. Sutherland Hudson, Dumbarton (defeating Provost Garvie).
- Mr. Robert Stone, Dalkeith.
- Mr. T. C. Lamb, wholesale chemist, Chatham, re-elected unopposed.
- Mr. F. J. Oliver, Maidstone, re-elected.
- Mr. H. Grimshaw, Manchester, re-elected.
- Mr. J. J. Wharby, wholesale chemist, Mansfield, re-elected unopposed.
- Mr. J. G. Agar, Mansfield, re-elected unopposed.
- Mr. P. J. Shacklock, Mansfield, re-elected unopposed.
- Mr. G. C. Druce, Oxford, re-elected.
- Mr. T. H. Harvey, manufacturing chemist, Plymouth, re-elected.
- Mr. W. Cotes, manager of the Queenborough chemical works, Queenborough, returned at the head of the poll.
- Mr. F. Mason, Rotherham, re-elected.
- Mr. J. Machin, Sheffield, re-elected.
- Mr. R. A. Robinson, Tunbridge Wells.
- Mr. C. P. Robinson, lint and pill-box manufacturer, Chesterfield, re-elected unopposed.
- Mr. John Green, Christchurch, re-elected.
- Mr. E. J. Bishop, Folkestone, elected for the first time.
- Mr. W. C. Hebdon, Halifax, unopposed.
- Mr. Joe Frost, consulting chemist, Huddersfield, elected for the first time.
- Mr. J. Grindell, chemical-manure manufacturer, Hull, re-elected unopposed.
- Mr. J. D. Rose, Jarrow.
- Mr. G. F. Wild, Hyde, elected for the first time.
- Mr. F. J. Miles, King's Lynn, unopposed.
- Mr. Henry John Turnbull, wholesale druggist, Sunderland, re-elected.
- Mr. Lawrence Thompson, Sunderland, re-elected.
- Mr. J. G. Mellor, Warwick, re-elected.
- Mr. W. H. Keys, manufacturing chemist, West Bromwich, re-elected.
- Mr. A. Kitchin, Whitehaven, unopposed.
- Mr. William Lund, York.
- Mr. T. W. Clarke, Hereford.

SMITH'S ADVERTISING AGENCY, of 132 Fleet Street, have arranged with an advertising agency of similar standing in New York, and the two firms are working mutually to induce advertisers in the two countries to use the facilities they offer. Smith's agency get the English advertisers for America, and the Paul E. Derrick Advertising Agency will get the American advertisers for England. Then the two firms will respectively exert themselves to give the advertisers the best value for the money they spend. Smith's issue a clever and persuasive pamphlet to English advertisers, a copy of which they send us. The cover is illustrated with the inevitable flags and the hands grasping each other across the sea, and the text gives many facts of interest to manufacturers with good articles to sell. The United States and Great Britain are already each other's best customers, and with the growth of population and the breakdown of hostile tariffs which sooner or later must come, the trade between the two must grow enormously.

New Companies & Company News.

EPSOM FORAGE SYNDICATE (LIMITED).—Capital 2,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on by Charles N. Holmes, at 158 Ossulton Street, London, and elsewhere, as "The Epsom Forage," and to manufacture, sell, and deal in forage, food, and medicines for animals. The first directors are Charles N. Holmes (managing director) and Thomas H. Browne.

OGSTON & TENNANT (LIMITED).—Registered in Edinburgh with a capital of 300,000*l.*, in 10*l.* shares. Objects: To acquire and carry on the business of Alexander Ogston & Sons, soap, candle, and tallow manufacturers, of Aberdeen, and the business of Charles Tennant & Co., soap-manufacturers, of Glasgow. Registered office, 80 Tennant Street, St. Rollox, Glasgow.

TOWER OIL COMPANY (LIMITED).—Capital 30,000*l.*, in 10*l.* shares. Objects: To acquire Provisional Patent No. 18,694 of 1898, granted to Jean C. E. Bataille for a "process of apparatus for the extraction and discolourisation of fatty bodies," and to carry on the business of oil refiners and merchants, seed-crushers, &c. The first directors are Robert G. Butts (chairman), John P. Shepherd, Thomas R. Sizer, and Albert W. Sizer. Registered office, 25 High Street, Kingston-upon-Hull.

CHEMICAL INVENTION SYNDICATE (LIMITED).—Capital 6,000*l.*, in 1*l.* shares. Objects: To enter into an agreement with Oscar Guttmann, and to acquire, own, and work Provisional Patent No. 16,220 of July 26, 1898, for "improvements in apparatus for the concentration of sulphuric acid and other liquids." The first subscribers (each with one share) are:—Oscar Guttmann, 12 Mark Lane, E.C., consulting engineer and chemist; Joseph F. Fuerst and Jules Fuerst, 17 Philpot Lane, E.C., chemical-merchants; Edward Packard, jun., chemical-manufacturer, and George H. Hughes, agricultural chemist, 155 Fenchurch Street, E.C.; Mortimer Woolf, Denmark Street, E., manufacturer; Albert M. Woolf, 52 Priory Road, N.W., gentleman. The first directors are Edward Packard, jun., and Oscar Guttmann (managing director).

GEORGE PEARSON (LIMITED).—Capital 2,500*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of a chemist, druggist, dentist, and general dealer carried on by George Pearson, at 52 High Street, Brierley Hill, Staffs. The first subscribers (each with one share) are:—Mrs. Emma M. Breeze, and Joseph E. Breeze, gentleman, of The Hollies, Brierley Hill; Mrs. Phœbe Lowries, Moor Street, Brierley Hill; James Pitt, South Bank, Brierley Hill, chartered accountant; Wm. C. Cooper, Brockmoor, Brierley Hill, clerk; James F. Addison, High Street, Brierley Hill, solicitor; Miss Helen J. Cox, 95 Tettenhall Road, Wolverhampton. Registered without articles of association. Registered office, 52 High Street, Brierley Hill, Staffs.

SHARP, WORSNAP & CO. (LIMITED).—Capital 8,000*l.*, in 5*l.* shares. Objects: To acquire the business carried on as "Sharp, Worsnup & Co.," at the Flash Pond Chemical Works, Wyke, near Bradford, and to carry on the business of manufacturing chemists, logwood grinders and cutters, dyers, dye and colour manufacturers, drysalters, &c. The first subscribers (each with one share) are:—Wm. Sharp, Norwood Green, chemical-manufacturer; Charles Worsnup, Wyke, chemical-manufacturer; Arthur E. Sharp, Wyke, chemical-manufacturer; Alphonse Sharp, Lightcliffe, traveller; Miss Gertrude Sharp, Norwood Green; Mrs. Annie Worsnup, Wyke; Wm. D. Taylor, Halifax, accountant. The first directors are William Sharp, Charles W. Worsnup, and William D. Taylor.

BRUNNER, MOND & CO. (LIMITED).—An interim dividend of 20 per cent. has been declared.

MAGOR (LIMITED).—Mr. Cornelius Bayley, chemist, of Walsall, has joined the board of directors of this company.

RICHARD WHEEN & SONS (LIMITED).—The statutory meeting of this company of soapmakers was held on Wednesday, Mr. Richard Wheen presiding. The Chairman

stated that ordinary shares had been allotted to the vendors in part payment for the business, and 100,000*l.* in cash. A Stock Exchange quotation has been applied for. There are 268 shareholders, and he appealed to them to do all they could to further the sale of the company's manufactures. "Use Wheen's Soap" would be a good motto for them. In the course of further remarks, Mr. Wheen said that the profits of soapmaking are better now than they were in his early days.

VIMBOS (LIMITED).—A largely-attended meeting of the shareholders of this company was held at Winchester House, Old Broad Street, E.C., on October 31, Colonel E. D. Malcolm, C.B. (the Chairman), presiding. In moving the adoption of the report and accounts, the Chairman said although the accounts dealt with a period of eighteen months, only six months of actual season trade could be included. Trade was increasing, and Vimbos was being well taken up by everyone. The sales for the opening weeks of this season were more than four times as large as those of the corresponding period of last year, and a big winter's trade was being looked forward to. As a proof of its merits Vimbos had been added to the contract-lists of the War Office and the Admiralty, and had been adopted by a large number of hospitals. Although the accounts showed a debit of 4,070*l.* 1*s.* 1*d.*, the company had been working at a profit since December. He then referred to the unfriendly criticisms to which the company had been subjected, especially in connection with the Scottish Fluid Beef Company and the Franco-Belge Company. With the first-named company he had nothing to do, and during the present year they had got quit of their connection with the French company; the contract having been rescinded and the rights and benefits arising from that company had reverted to Vimbos. It had been considered conducive to the interests of the company to cancel the original contract with Mr. Auld by paying him 6,000*l.*, and appointing him manufacturing adviser. As the company had now reached a stage in its operations when a strong financial position was necessary, he hoped the shareholders would co-operate with the directors to secure that result. He regretted they were not in a position to declare a dividend, but that was solely due to the heavy initial expenses incurred in establishing the business.

Mr. R. J. Thomson seconded the adoption of the report; but Mr. Brush wanted to know what amount remained of the large item of 50,000*l.* on advertising account; and Mr. Edwards was of opinion that it was time the company was wound up, when the gross sales for the six months previous to last June (15,739*l.* 14*s.* 2*d.*) did not nearly pay for the advertising alone. The latter argument was opposed by Mr. Wilson, who said 50,000*l.* might be well and judiciously spent on advertising in this instance, even though the turnover did not amount to 50*l.* A belligerent supporter of Mr. Edwards wanted to know the last speaker's name, but he was shouted down with cries of "What's your own name?" Nothing daunted he rose again and said simply, "Not Faith, anyhow!" "Nor Charity!" was the retort from a corner of the room.

After several questions had been asked and answered, the motion was put to the meeting and carried unanimously.

The retiring directors, Messrs. J. Burn and R. J. Thomson, were re-elected, and Messrs. Clough, Armstrong & Ford were re-appointed auditors. The Chairman then moved "that the directors be and are hereby authorised and empowered to borrow any sum or sums not exceeding 60,000*l.*, in addition to the borrowing powers given in the articles of association." In reply to a question, the Chairman gave an undertaking on behalf of the directors that the fresh capital would not be employed to pay off existing loans, but would be used solely for the advancement of the business. This motion was seconded and carried unanimously.

A MAN WITH AN EYE TO BUSINESS: An oculist.—*Moon-shine.*

CYANIDING, or the treatment of trees infected with insect-pests by prussic-acid gas, is coming much more into favour. The process is to place a portable tent over the tree, and generate prussic acid beneath the tent. The process is more costly, but is much more effectual in destroying insects than spraying. It does not destroy fungoid pests.—*C. & D. of Australasia.*

Correspondence.

In writing letters for publication correspondents should adopt concise, but not abbreviated, style. They are requested to write on one side of the paper only.

Notice to Correspondents. Letters, with or without a nom-de-plume, must be authenticated by the name and address of the writer.

Queries should be written on separate pieces of paper, and the regulations printed under the sections to which they apply should be strictly observed.

Mr. Beecham and the Dewsbury Chemists.

SIR.—Will you kindly allow me to correct an erroneous impression which I think is likely to follow a perusal of your report of Messrs. Beechams' interview with the members of our Association on October 20. In Mr. Glover's remarks on average working expenses you say: "He appealed to the gentlemen present to say what were the working expenses on an article like Beecham's pills, and it was agreed that 2½ per cent. was ample." And in your editorial comments you speak of the 2½ per cent. which Mr. Glover so ingeniously induced the Dewsbury chemists to reckon as the working cost on the sale of Beecham's pills. Whilst freely admitting the ingenuity of the speaker, both on this point and also in his attempt to show a 90-per-cent. profit on a year's turnover of Beecham's pills, it is quite contrary to fact to assume that either of these propositions had the assent of the meeting. Owing to several members having to catch trains for home, the discussion had to be adjourned to the next monthly meeting.

I am, yours respectfully,

R. GLEDHILL,
Hon. Secretary.

9 Nelson Street, Dewsbury,
October 31.

SIR.—In the last paragraph of the circular from Mr. T. Beecham, reporting a paper read before the Dewsbury Chemists' Association on October 20 on "Cutting and the Fixing of Prices," by his manager, Mr. Rowed, it is stated that "Mr. Barker rather jarred the harmony of the meeting at the conclusion with his insistence that they should give nothing undue prominence that did not carry 2d. in the shilling; but he did not precede his statement by any argument whatever, and found no supporter."

This is very misleading. The facts are that Mr. Rowed, with Mr. Glover's assistance, monopolised the whole of the time at the disposal of the meeting until, when members should have been privileged to reply, several of us found we had only five minutes to catch our trains home. I, being anxious to ventilate my opinions, could scarcely finish before our worthy President was obliged to move a hurried vote of thanks to Mr. Rowed and Mr. Glover for their visit. Mr. Rowed may therefore be a little surprised when he reads a report of the discussion which will take place on November 7 to find that I should not have been entirely without support if time had allowed other members to speak.

Heckmondwike.

A. B. BARKER.

SIR.—Mr. Beecham, who I presume speaks through his manager, fears to take steps to protect the price of his pills, because it might damage his business. How is it, then, that in two large places like Southampton and Glasgow he has adopted some sort of a plan and has actually an agreement in force there?

Are there not some of the biggest cutters in the kingdom in Southampton especially? Has he found it damage his business there? Nine out of ten ordinary retail chemists will consider 10½d. an absurd fixed minimum price, but if a rise would damage the sales, the extra ½d. would have done in Southampton, and still more so the 1d. in Glasgow. Will Mr. Beecham give us figures as to the decrease in sales in these two towns since the agreement came into force? If there is no decrease, and Mr. Beecham is sincere in his desire to assist retailers, why does he not take more active steps to secure a generally better state of things?

Mr. Beecham speaks of four firms who have over a hundred shops (each, I presume). They sell between them half a

million boxes per annum. To be within the mark, strike an average of seventy-five shops for each firm; that makes 300. Half a million divided by 300 makes about three dozen boxes per week for each shop. Say there are three such shops in a town of thirty chemists, surely the other twenty-seven chemists sell more than nine dozen boxes a week between them. Therefore it would pay Mr. Beecham to secure the affections of these twenty-seven chemists rather than those of the three cutters.

Yours truly,

H. B. SHARMAN.

Northwood.

SIR.—It is strange to me how Mr. Beecham fails to appreciate the position of the small retailer. I am in business to gain a livelihood. I can only do so by making a profit on what I sell. I certainly do not consider I get a fair profit on Beecham's pills, and therefore I do not show them or recommend them. In this I have no animus against Mr. Beecham more than against the proprietors of similar unprofitable lines. There is, however, another reason why chemists should set their faces against Beecham's pills. My attention has been drawn to page 7 of booklet wrapped round each box of these pills. The heading of it is "Venereal affections and the follies of youthful indiscretion." I must protest against being made the medium for handing over a pamphlet treating of this nasty subject to respectable men and women, and, I think, not many chemists will regret that they are now no longer the principal medium for circulating it.

I am,

H. C. (85/1.)

SIR.—I think Mr. Beecham has gained more friends by his system of mutual agreements than he would have done had he placed his pills on the P.A.T.A. list.

Being manager of a large store having several branches and usually a stock of several thousand pounds' worth of proprietary articles, I thought a few statistics about the articles listed by the P.A.T.A. in their October issue would be interesting, so I proceeded to dissect them, and the result was certainly astonishing.

In the first place, I find there are about 433 different articles (including their various sizes) listed, and I compared their present sale (*i.e.*, twelve months to end of October) with the year 1895, a period prior to the active operation of the P.A.T.A., the following being the result:—

Twenty-six articles are old-established; of these our sales pan out as follows: 1 has decreased 90 per cent.; 1, 66 per cent.; 3, 60 per cent.; 5, 50 per cent.; 1, 42 per cent.; 1, 40 per cent.; 2, 34 per cent.; 1, 30 per cent.; 1, 29 per cent.; 1, 25 per cent.; of 6 the sale has ceased; of 3 the sale has increased, one being an article only recently listed.

Eight are new preparations, and are not comparable.

Forty-five are held in stock, and are well designated "shelf-warmers."

Three hundred and fifty-four are absolutely not stocked, and for these there is no local demand; whilst another article not now on the list we have tried to sell at the stipulated price—then at half-price—and now it has gone to feed cattle.

In face of these figures, can anyone be surprised at such men as Messrs. Day or Boot fighting against coercion?

I am not an enemy of the P.A.T.A., and think it has many good points, and, if consistently worked, would prove beneficial; but to stop supplies of twenty-six articles because a retailer happens to obtain and sell one of the 354 below their price is too absurd, and simply spells ruin to any manufacturer who supports their policy.

There are at the present time several mutual agreements in force—notably, Vi-Cocoa, Vinolia, Elliman's, Liebig's, Bovril, Wincarnis, &c. In no instance do I find the keenest cutters desirous of breaking them, whilst, on the other hand, they pride themselves on cutting several articles on the P.A.T.A. list, and this is the case in most towns. To my mind, there cannot be much doubt that it is a splendid and cheap advertisement to cut any of the articles, even when they are bought from your next-door chemist at full face-value; and apparently Mr. Boot thinks so to, hence his firm's advertisement.

As for myself I prefer "free trade," and beg to subscribe myself

FAIR TRADE. (87/51.)

Worth a Guinea a Box.

SIR,—Is it not pitiable to see this valuable remedy, so largely advertised as worth a guinea, appraised in Glasgow, with the consent of its proprietor, as being only value for 11*d.*, and in aristocratic Torquay at 10*½d.*? Surely this "Master of Millions" has forgotten the dignity of his position. He admits that it would take an Act of Parliament to stop the cutting. Why should not the biggest pill man the world has ever seen issue an edict in his own kingdom and rub into his subjects a good dose of "Elliman's anti-cutting system." Where Elliman's is used it goes without contradiction that the "Days" very soon put their "Boots" on other legs.

So much for the retail side of the question. The wholesale houses have a grievance too. Mr. Beecham has given them the go-by. He had 500 customers before he reduced his minimum quantity to 5*l.*; he now has 2,500. He therefore admits being the biggest cutter in the trade, because he compels the wholesale to sell at his own prices to the remaining 27,500 dealers in the kingdom.

Mr. Beecham refuses to pat the P.A.T.A. on the back. He now has a splendid chance, which he should not throw away, of fixing one price for credit and another for cash sales, giving the wholesale distributors a chance to help the small dealers against the mushroom concerns of the day, which, in the course of another decade or two, will be things of the past.

Yours truly,
WHOLESALER. (87/56.)

Blackburn Apprentices.

SIR,—Mr. Holt, in his address at the recent meeting of the North-east Lancashire Chemists' Association at Blackburn, says qualified assistants "prostitute" themselves for the benefit of limited companies, and he would like to obtain power to erase the names of such "offenders" from the register.

In my opinion the chemists of Blackburn are responsible for many of their apprentices becoming prostitutes of this kind. There are about thirty chemists in business in Blackburn, and of these I have seen but one advertise for an assistant during the last eight years. Indeed, there are only a few qualified assistants in the town. But there is scarcely a pharmacy there where one or more apprentices are not to be found. Every year upwards of half a dozen of these apprentices are turned out after having served their four or five years, and as their chances of being kept on after apprenticeship are *nil*, they have to take a berth where obtainable—frequently in stores. Even if they qualify immediately after apprenticeship they are not competent to fill a berth in a good-class pharmacy, because, in Blackburn, practically no dispensing is done by the chemists, and consequently the art cannot be acquired by the apprentice. Is it right to employ apprentices simply for the sake of cheap labour when it is impossible to give them an insight into dispensing, manufacturing, or, indeed, any branch of the trade, except such processes as weighing-up soft-soap and soda?

Yours sincerely,
November 1.
No PROSTITUTE. (85/74.)

Chemists' Assistants and Ambulance Corps.

SIR,—I have read with interest the communication from Surgeon-Major Marshall, with reference to the enrolling of chemists' assistants in his corps, so as to join the ambulance classes for instruction as stretcher-bearers in his battalion. I quite admit the value such a training would be to young men in our line, but I fear Surgeon-Major Marshall's appeal will meet with but a poor response, not because chemists' assistants do not realise the utility of the course and the advantages they receive from practically gratuitous instruction in ambulance-work, but because they cannot, for lack of the necessary time.

If the hours of business in the districts which the Surgeon-Major suggests as recruiting-centres are no better than the usual run of suburban business, I do not see how an assistant, who in a great many cases has to take a certain night, and cannot change, can attend volunteer drills which may take place on the very night he has to work until 9 or 10 o'clock. There is one more reason why I think it will be very hard to raise the half-company of regimental stretcher

bearers, and that is the amount of drills a volunteer (and to be a stretcher-bearer you must first be a volunteer) has to do to render himself efficient. The number of drills required in the corps to which I belong is sixty in the first two years, of which thirty are to be done in the first year. This means that out of about four or five of his free evenings, the assistant must devote three to volunteer drilling, either squad, company, or battalion, of which last a certain number must be done to be "efficient." Besides, a volunteer must fire his class, and this, as a rule, means a whole day at the ranges. I do not think many governors would relish their assistants asking for half-a-dozen Saturday afternoons off and so be left to bear the brunt of a heavy Saturday evening's retail.

I would suggest a course which, though entailing a lot of trouble, might result in a fair number of assistants joining the classes, and that is for the Surgeon-Major to interview the chemists in the neighbourhood of the drill-halls, and induce them to grant their assistants an extra hour or two per week to enable them to attend the classes. The physical training which is part of the training of a volunteer would be of immense advantage to young fellows who have none too much leisure, and the benefits accruing to them, from a business point of view, from a course of instruction by a competent professor in ambulance-drill would amply repay them for the time spent.

Yours faithfully,
October 30.
P. B. FALLOON.

Slow Photographic Houses.

SIR,—We can fully bear out your correspondent's statements *re* above. It takes about three weeks to get photo goods from London, and then there are invariably half-a-dozen or more "shorts."

Yours truly,
Sligo, October 29.
C. J. DENNING & CO.

SIR,—We cannot agree with your correspondents who state that all photographic-sundries houses are slow and unreliable. We can easily guess to which firm their letters refer, and feel that we must say that to us they have always been most gentlemanly and obliging. True, they have kept us waiting several times lately, but the letter which they circulated last month ought sufficiently to explain matters. May we ask your correspondent the question, When the business of a firm increases to such an extent that an enlargement of their premises becomes necessary just in the busiest season, what can they do but take orders in rotation? Then the comparison with druggists' sundries is scarcely fair. The sale of castor oil, glycerin, or Beecham's pills does not vary so much with the season as do dry plates and other photographic materials. We do not in the least doubt the truth of your correspondents' assertions, but write merely to show that the experience of others may be somewhat different.

Yours,
Two NORTHERN CHEMISTS. (87/15.)

Miscellaneous Inquiries.

We reply to subscribers and their employés only upon subjects of interest to other readers generally. When more than one query is sent write each on a separate piece of paper. When a sample accompanies a query Notice to Querists. full particulars regarding the origin and use of the sample must be given, and it must be distinctly labelled. Queries are not replied to by post, and those sent anonymously are disregarded.

60/1. *Zemo* asks us if we can explain the following? A friend of his no sooner takes half or quarter of a glass of beer than he commences to sneeze violently, and almost incessantly, for about two hours. Wines and spirits do not produce the same effect. [We cannot; perhaps some of our subscribers have theories on the matter.]

The subscriber who wanted to know the maker of effervescent-sulphur lozenges can get the name on application to the publisher.

71/52. *Pulv. Anisi*.—(1) "Veterinary Counter-practice (C. & D. office), 3*s.* 6*d.*, contains concise information on

cattle-diseases. (2) Mr. Marshall, of the Jenner Calf-lymph Institute, informed us that the normal temperature of a calf is 102 5° F.; that of a cow is slightly lower.

69/49. *B. P.*—The Boot sole Finish has a composition resembling the following:—

Pipe-clay	...	...	...	...	3iiss.
Iron peroxide...	...	...	...	5ss.	
Boric acid	...	...	...	5j.	
Oil of citronella	...	...	...	m.v.	
Gelatin	...	...	...	3iiss.	
Water to	...	...	...	3x.	

Dissolve the gelatin in the water and gradually add to the other ingredients, previously well triturated together.

63/51. *Wiltz* sends a sample of *Roup powder* for fowls which has proved very effective. A tablespoonful of the powder is mixed with soft food and divided between six full-grown birds every morning. The powder has the following composition:—

Powdered iron sulphate	...	...	3iv.	
Iron peroxide...	...	...	5ij.	
Precipitated chalk	...	...	3iv.	

Mix.

63/69. *C. W.*—The Headache-powders are acetanilide.

55/54. *W. A.*—The Cake-colouring Powder is erythrosin diluted with sugar. The powder should be carefully protected against damp, as it is very hygroscopic.

53/45. *C. O. W.*—Your inquiry does not come under the rules which govern this column.

61/58. *Jean.*—The Cough-mixture which "sells like hot cakes" has the following formula:—

Acet. ipecac.	...	...	...	3iiss.
Syr. scillæ	...	...	...	3ij.
Syr. tolu	...	...	...	3ij.
Syr. rheadæs...	...	...	...	3vj.
Aq. chloroform. ad	...	...	...	3xx.

Dose: A teaspoonful when required.

60/74. *Calves.*—Your sample of Calf-meal is essentially as follows:—

Finely-ground linseed	...	...	4 lbs.	
Barley-meal	...	...	8 lbs.	
Wheat-flour	...	...	8 lbs.	

Mix.

60/67. *Box.*—The composition you send is a kind of sealing-wax, we should say, judging by its physical properties.

58/73. *Nemo.*—Skin-softener as your sample:—

Powdered tragacanth	...	...	3ij.	
Rectified spirit	...	...	3ss.	
Glycerin	...	...	3ij.	
Boric acid	...	...	5j.	
Oil of almonds	...	...	m.v.	
Oil of rose-geranium	...	...	m.xv.	
Water	...	...	3vj.	

Dissolve the boric acid in the mixture of the glycerin and water. Dissolve the oils in the spirit and mix with the tragacanth in a mortar; then add the glycerin-mixture all at once and stir till uniform.

70/46. *G. (Lahore).*—*Preserving Indianrubber.*—The best thing for this is glycerin. The article is warmed and a little glycerin rubbed in. Grease should on no account be applied. We warn you, however, not to expect much from the glycerin method, as there is really nothing known which is absolutely effectual.

58/23. *J. E.*—We do not know what "aq. felix" is.

69/31. *Deodorant.*—Formalin, diluted with twice its volume of water and scented with coumarin, would make a Deodorant suited for toilet-antiseptic purposes as required by your label.

75/10. *Orient (Brazil).*—The best way to Concentrate Milk so as to preserve it six or seven months is to evaporate it in jacketed vacuum-pans. For your purpose it will probably

suffice to concentrate to one half, and then run into tin cans. The tin cans should be quite filled, and soldered down while still hot. It is not necessary to add either sugar or preservative if proper precautions are taken. The tins require to be previously sterilised by scrubbing, then by a jet of steam, and finally rinsing with pure cold water.

74/74. *Kimia.*—*Neuralgia-mixture.*—A quinine and chloride of ammonia mixture, such as the following, is probably the safest for general sale:—

Quinin. sulph...	...	...	...	gr. xl.
Ammon. chlor.	...	...	...	3vj.
Ac. sulph. dil...	...	...	...	3ij.
Tr. cardam. co.	...	...	...	3j.
Syrupi...	...	...	...	3ij.
Aq. ad ...	...	...	...	3xx.

Mix and filter bright.

Dose: A tablespoonful in water every three or four hours till relieved.

76/40. *Kornkure.*—You will find formalin a good preservative for mushroom-ketchup. Two teaspoonsfuls of the commercial 40-per-cent. formalin are ample for 1 gallon.

76/11. *J. B.*—A few doses of a powder such as the following is the treatment for Distemper in Ferrets:—

Potass. nitr.	...	...	...	3ij.
Antim. nigr.	...	...	...	3j.
Pulv. anisi	...	...	...	3j.

The dose is from 12 to 24 gr. daily in a little soft food.

55/39. *Diapente.*—Ol. anchusæ, with or without a little ol. origani, is most generally given for "oil of tench" and "oil of viper" in veterinary-prescriptions.

52/12. *Yorkshire Bite.*—The Embrocation for Curb, Splint, Spavin, &c., is made from such a formula as the following:—

Pulv. cantharid.	...	...	...	3iss.
Rad. anchusæ	...	...	...	3ss.
Aceti opt.	...	...	...	3x.
Spt. vini	...	...	...	3x.

Macerate for a week and filter.

Apply with a sponge once a month.

60/42. *Foaming.*—The following is the best treatment to check *A. Horse Foaming at the Mouth*, and whose teeth are all right. Give a draught of $\frac{1}{2}$ a pint of linseed oil, and nightly a wineglassful of the following mixture:—

Potass. chlor...	...	...	...	3iv.
Tr. bellad.	...	...	...	3vj.
Tr. asafetidae...	...	...	...	3vj.
Aq. ad...	...	...	...	0j.

59/47. *Llanberis.*—(1) We do not keep a file of *Science Siftings*. (2) Children's Cooling-powders.—The following are an improvement on those you suggest:—

Potass. chlorat.	...	...	...	3j.
Pulv. glycyrrh.	...	...	...	3iiss.
Pulv. sacchari alb.	...	...	...	3iiss.

M.

Dose: For child of 2 to 4 months, 1½ gr.; 4 to 6 months, 3 gr.; 6 to 10 months, 4½ gr.; above that age, 6 gr.

(3) Laxative Drops:—

Ext. cascar. sag. s. sapore	...	...	...	3iv.
Ext. glycyrrh. liq.	...	...	...	3ij.
Elixir simplicis	...	...	...	3ij.

M.

Dose: From mxx. to 5j.

(4) A good formula for the syrup you name is given in "Pharmaceutical Formulas," page 608. (5) Remington's "Pharmacy" is a good work. It is published at 2ls. by Barroughs, Wellcome & Co.

46/54. *E. J. B. (New York).*—(1) Eucalyptus oil is chiefly used as a disinfectant, perfume for soap, and also medicinally. (2) We do not know the paper you mention.

56/20. *E. O. J.*—Crimson Colour for Carboy.—See *C. & D.*, April 30, 1898, page 737.

58/1. *T. S. H.*—(1) To Destroy Bugs that infest lime-washed walls and ceilings, all the cracks and crevices should be liberally brushed with a solution of corrosive sublimate made by dissolving an ounce of corrosive sublimate in a mixture of 4 oz. of spirit and 16 oz. of water, and colouring with methyl blue. (2) A tablespoonful of turpentine or paraffin poured into the ants' hillocks will soon get rid of them.

60/46. *E. H. R.*—The following are suitable books for a collector of British Flies and Beetles:—Kappel and Kirbys' "Beetles, Butterflies," &c., 3s. 6d. (Cassell); Kirby's "Text-book of Entomology," 10s. 6d. (Sonnenschein); Lucas's "British Butterflies," 3s. 6d. (Upcott Gill); Theobald's "British Flies" (Stock).

68/5. *S. H.*—In the Educational number of THE CHEMIST AND DRUGGIST, September 3, 1898, page 415, you will find the names of colleges in Manchester where coaching for the Preliminary examination can be had.

67/40. *L. B.*—Powdered condensed milk is an article of commerce. It would be unprofitable to powder it in small quantities.

68/6. *Benjamin.*—We published some particulars of the Salisbury Cure in the C. & D., September 26, 1896, page 506, and October 3, 1896, page 533.

68/33. *G. B.*—Removing Tattoo-marks.—See C. & D., February 26, 1898, page 375, or "Pharmaceutical Formulas," page 437.

64/46. *Vinaigre.*—Artificial Vinegar is prepared by diluting acetic acid with water, colouring with burnt sugar, and adding a small proportion of acetic ether to give the odour of the real thing. On evaporating and igniting the residue of such a vinegar there will be found an absence of the phosphates which characterise malt-vinegar.

62/68. *H. E.*—A White Paint suitable for mica, subjected to the action of spirit is prepared by rubbing zinc oxide very smooth with solution of water-glass. This paint retains its whiteness fairly well.

69/34. *F. G. P.*—The Tincture-maceration Process of the B.P. is a perfectly rational one: it was the old process of making up with spirit which was bad. For example, in making tr. calumbe, 2 oz. of calumba is macerated in 1 pint of menstruum for such a time that osmosis is completely established, and at the end of the period (the macerate having been frequently shaken) the liquid in the interior of the drug-cells is the same as that outside, 1 in 10. On pressing and filtering the tincture is still 1 in 10, but if "made up" in the old way it is, of course, diluted, and is not 1 in 10, but probably 1 in 11 or 1 in 11½, according to the pressure applied to the marc.

70/2. *H. W. P.*—Simmonds's "Commercial Dictionary" does not explain the terms you are in doubt about. "C.i.f." means cost, with insurance and freight, paid to the port of destination, and the consignee must meet expenses of landing from the ship, clearing, &c.; "f.o.b." means free on board; "f.o.r." free on rail. "Naked" means without bottles, &c.

63/17. *Nemo.*—Chillie-paste.—The B.P., 1898, includes a formula for a substitute for this under the name "Ung. capsici." It can be improved by increasing the spermaceti and digesting the capsicum in the oil for a much longer time, so as to make the ointment of better consistence and more completely exhaust the capsicum.

65/73. *Jimmie* wants to make a mist. cerii co., but is puzzled to find a Soluble Salt of Cerium. The best salts to use are the citrate, tartrate, and lactate, which are best prepared by the process devised by the late Mr. J. B. Mackey. First of all, hydrated oxide of cerium is made by precipitation from nitrate or sulphate of cerium by caustic soda or potash. The hydrated oxide is then converted into citrate, tartrate, or lactate by boiling in a solution of the acids; the salt obtained is then dissolved in a solution of citrate, tartrate, or lactate of ammonia, potash, or soda.

The New Optical Diploma.

A Pharmaceutical Candidate at the Spectacle-makers' Company's Examination tells us What it is Like.

THE first part of the examinations which are being held under the examination-scheme of the Spectacle-makers' Company commenced on Tuesday and Wednesday evenings of this week at the Northampton Institute, and the written part was taken on Thursday evening.

Mr. W. H. E. Thorntwaite, F.R.A.S. (the Master), Sir Marcus Samuel, Mr. Bickerstaff, Colonel Sewell (Clerk), and other members of the Optical Committee of the Company had charge of the arrangements. The examinations began at 5 o'clock, and were continued, with an interval of an hour from 7 to 8, till 10 o'clock each evening. About a hundred candidates altogether were examined, one being a lady. A goodly number of candidates were Londoners and many came from the country—such places as Kilmarnock, Carlisle, Deal, Tenby, Tunbridge Wells, and Leeds being represented. The examiners were Professor Silvanus Thompson, Mr. Lindsay Johnson, and Mr. George Paxton. The candidates who pass are to be called Fellows of the Spectacle-makers' Company and will receive a handsome framed diploma. A pharmacist who took the examination supplies us with the following account of his experience:—

For the best of reasons—business, to wit—when I heard through the C. & D. of the S.M.C.'s scheme I determined to go in for the examination, so in due course I paid the fees (they came to 4l. 10s., of which 3l. is for stamp-duty). On October 28 I received a notice to appear for examination on Tuesday at 6 P.M., and again on Thursday at 5. Arriving at Northampton Institute a little before 6 I was introduced to the Master and Clerk, who were wearing their robes and insignia of office. There were also there about a dozen liverymen who looked quite mediievally professional in their fur-collared robes. I was given four cards on which were filled in my number, initials, age, length of time in business, and nature of business. I figured as "optician and pharmacist." The examiners do not know the names of the candidates. Each card was punched with a hole for filing purposes, and one was required to be given up to each examiner. I noticed they used the back for noting their impressions of the candidates. At five minutes to 6 I was told to be in readiness for my turn, and that when ushered into the examination-room I should have five minutes to sit down and compose myself. At 6 the Master opened the door of the examination-hall and rang a bell, when each of the candidates who were being examined moved on one, and I was left sitting by the door. In five minutes more the master opened the door and let in another candidate, and I passed on to be examined by Professor Silvanus Thompson. The Professor wore his robes, and was seated at a table on which was a varied collection of optical apparatus and models. He greeted me with a pleasant smile which put me quite at ease. He handed me a lens, and asked me what kind it was. It was plano-convex. He then showed me concave and cylindrical lenses, and asked me how I could tell their strength. I told him to the best of my ability. Professor Thompson then asked me if I was familiar with a Geneva lens-tester he had on the table. This was a simpler one than what I had been accustomed to, and I told him so. He showed me in a few seconds how to use it, and I thanked him, with a sigh for the Galen-place malcontents. He then asked me what was meant by focal length and how I would determine it; next what sort of an image a convex lens makes when it is focussed ready for measuring. I told him it was a focal point, and he wanted to know what form the concave lens gave under similar conditions. I said a line, and by gentle pressing I admitted that "focal line" was a better definition. I was then taken on the construction of the human eye, and by means of a ten-times model on the table told him the names and purposes of the different parts. When I reached the ciliary muscles and processes I was taken on as to the meaning of accommodation, and the why and wherefore of this involuntary action of the eye. The questioning proceeded to the refractive effects of the aqueous and vitreous humour and the crystalline lens, and I

had answered a few questions on the subject when Professor Thompson placed a lump of crystal in my hand, and asked me if it was glass or crystal, and how I would tell the difference optically. I was describing the tourmaline test, and was about half-way through, when the bell rang, and I passed on to Mr. Lindsay Johnson, F.R.C.S., who was sitting in his robes at the next table. Mr. Johnson called my attention to a diagram of the eye, and, moving the back part of the diagram backwards, asked me what sort of an eye I called that. I said it was myopic, and he asked me the cause of myopia. I said it was due to lengthening of the optical axis by using the eye for close work, and he asked me how I knew that. I said that savages and persons engaged in agricultural pursuits did not suffer from myopia. I was told that was correct, and that close study brought on myopia. Mr. Lindsay Johnson next asked what sort of glasses I should give to correct the defect, and I said, "concave." He asked me why. "Because the eye needs light," said I, "to be converged a little before it reaches it." I then had a few questions on what was the punctum remotum and punctum proximum, and how determined, and if the "amplitude of accommodation" could be expressed by means of a lens. I said "Yes," and gave the way to do it. The diagram of the eye was then shifted to hypermetropia, and I was asked the name of the defect, and how corrected; also asked what changes take place in the eye in glaucoma, and he related a case of a lady who had gone to several celebrated oculists and they had not been able to say what was the matter with her. It turned out she had glaucoma, which comes on somewhat suddenly. I was asked a few more questions, such as to the effect of putting lenses at different distances from the eye, when the bell rang, and I passed on to Mr. George Paxton for a drilling in practical work. Mr. Paxton has a couple of assistants to help him, and stands at the side of the candidate while examining. I was asked to measure the optical centre of the glasses of a pair of spectacles, and also the height of the bridge. A deeply concave spectacle-lens was handed me, and I was asked the usual way opticians found out the focus of such a lens. I said by neutralising with a convex lens, when Mr. Paxton handed me a convex lens, and asked me if that was strong enough to do it. Looking through it at a diagram on the wall I saw that the power was still concave, and said so. A pair of bifocal glasses were then handed me, and I was asked what was the trade name for them. I said "cemented bifocal glasses." The examiner then showed me the form of bifocal spectacles in which each glass consists of two halves, and asked me whether they were better than the cemented bifocals. I said the cemented ones were the better for several reasons, which he asked me to name. Mr. Paxton then handed me a cylinder spectacle-lens, and asked me how I would determine the axis, and how I would indicate any particular direction of the axis for the working optician in making up the glasses. This I did, and was answering a question on adapting bridges, when the bell rang, and I passed out into the outer hall. My impression of the oral examination is that it is a thoroughly practical examination, and I was struck with the businesslike manner in which the arrangements were carried through. On Thursday night I presented myself for the written part of the examination, and was given two hours in which to answer the following fourteen questions:—

1. How would you determine the focal length of a simple bi-convex lens with faces of equal curvature? Give all the practical methods you know of.

2. In what way is the position of the principal focus of a lens dependent upon the choice of the curvatures? Illustrate your answer by reference to the positions of the front and back foci of a plano-convex lens of + 20 D. Does it matter which surface you turn towards the source of light as regards definition?

3. Are two lenses, say, for example, a + 3 D S and a + 5 D S (placed together behind one another in a trial frame), exactly equivalent to a single lens (in this case a + 8 D S) whose power is numerically equal to the sum of their separate powers? If not why not?

4. What proofs are there that the human eye is not achromatic? What kind of combination of lenses would be required to correct its chromatic aberration?

5. A person requires, for the R Eye only, - 6 D S for distance and - 3 D S for reading, but only wants one pair of spectacles. State the various ways in which this can be managed. Which method do you prefer?

6. A prescription is given you as follows:—3 DC [axis] hori-

zontal $\supset + 1\frac{1}{2}$ DC axis vertical R and L. State the different methods of working such a lens, and give reason for your choice of curves.

7. What are pebble lenses? State the relative advantages of pebbles over glass, or vice versa. How can you distinguish between them?

8. An emmetrope, aged 60, has had his lens removed for cataract. What glass would you give for reading, and what for distant vision? Could he see clearly with either glass at a metre?

9. A boy aged 12 has vision = $\frac{2}{5}$, but with a concave lens of 1.25 he has vision = $\frac{3}{5}$. What tests would you employ to ascertain the nature of his defect?

10. An oculist has prescribed for a man aged 60, for distant sight—

R - 1.5 DS

- 2 DC axis horizontal

L - 4 DS

- 0.75 DC axis 45

He requires glasses for about 15 or 16 in. reading distance. Write the formula.

11. A youth aged 12 sees best with - 14 D S R and L. Would you give him this correction on your own responsibility, and if not, state your reasons.

12. A boy aged 10 has vision = $\frac{2}{5}$, and with - 2.5 D S he sees $\frac{3}{5}$, but on testing his P.P. is found to be at 12 c.m. What is probably his defect, and give your reason.

13. What do you understand by the terms "amplitude of accommodation" and "range of accommodation"? Illustrate these terms in the case of an emmetrope aged 20, a myope of 3 D S aged 20, and a hypermetrope of 3 D S of the same age. Where would the P.P. be situated in each case?

14. Explain the importance of having spectacle lenses correctly centred. What would (roughly speaking) be the effect on a customer of having his spectacle lenses of - 10 D S, each decentred 4 m.m. inwards, supposing that he had binocular vision?

Before beginning we were allowed a quarter of an hour for refreshments, which were served in an adjoining room.

I finished my paper a little before the allotted time, and am now awaiting the result of the examination, which I am informed will probably be made known in about a week.

Varia.

LACTOPEPTINE AND ANTIKAMNIA COMPETITION.—Mr. J. Morgan Richards informs us that the following prizes have been awarded in the competition instituted by his firm a year ago:—First prize, 20*s*, Mr. W. Lyle, Rothesay; second prize, 10*s*, Mr. Lang Burgoyne, Ilfracombe; third prize, 5*s*, Messrs. Griffiths & Ingle, Farnham; fourth prize, 10*s*, Mr. Nicholson, Manchester; fifth prize, 10*s*, Mr. Goodess, Leicester; sixth prize, 10*s*, Mr. Fraser, Edinburgh.

THE olive-growers of California will probably gather this winter the largest crop ever known in the Union, says the *Retail Grocers' Advocate*, and for the first time the production of this fruit is expected to be in excess of the demands for consumption in California alone. An enormous planting of olive-groves has been made in California in the last few years, estimates putting the area of bearing-olive groves at about 6,000 acres, while the total orchard area is about 24,000 acres.

TABLOIDS IN GERMANY.—The continued supply of Burroughs, Wellcome & Co.'s preparations has recently been sharply criticised in pharmaceutical circles. A report of the Nassau district meeting says that "secret remedies, among which may be classed Burroughs, Wellcome & Co.'s preparations, find general condemnation, and that the doctors who encourage the use of them are mainly responsible for the evil. The whole tabloid system is superfluous, since pills, or home-made tablets, can take their place." It was resolved to consult the Hamburg regulation in the matter. By the terms of the latter, apothekers are bound to sell only preparations made by themselves or in other pharmacies, and doctors are required to prescribe accordingly. It was also resolved to adopt the practice of Baden, Hesse, and Berlin, and exhibit imported specialities such as preparations of iron in plain packing. The President informed the meeting that the "Verband chemisch-pharmaceutischer Fabriken" had taken sides in the question by declaring the illegality of certain prescriptions. The Berlin "Apothekerverein" has also resolved to bring forward the question of medicinal tablets and the sale of Burroughs, Wellcome & Co.'s preparations at their next sitting.

Trade Report.

Notice to Retail Buyers.

It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk, and, for crude drugs, without charges. For fuller particulars see the article "Lowest Trade Terms" in THE CHEMIST AND DRUGGIST, March 19, 1898, p. 473. C.i.f. quotations are for London unless when otherwise stated.

Buyers of essential oils are particularly requested to note that low quotations, especially for Sicilian essences, are rarely, if ever, accompanied by guarantee of genuineness.

42 Cannon Street, London, E.C.: November 2.

BUSINESS is not very brisk this week, but there was a good deal done in manufacturing and druggists' soft shipping opiums at the end of last week. Ergot has quieted down, but values are maintained. There have been negotiations for a rise in refined camphor. German refiners seem anxious for it, and the English also appear to be, but so far nothing has been done. The following are the principal changes of the week:—

Higher	Firmer	Lower
Ammonia sulphate	Borax	Acid, citric
Copper sulphate	Benzol	Bleaching-powder
Jalap	Galls	Lead acetate
Pimento	Oil, cocoanut	Mercurials
Quicksilver	Opium	Naphthas
Thymol	Potash cyanide	Nutmegs
Tragacanth	Shellac (S.O.)	Oil, cloves
		Turpentine

Since the foregoing was written the importers of quicksilver have advanced their price 5s. per bottle, but it is unlikely that mercurials will be changed from the new rates that came in on Tuesday. All sorts of Persian produce connected with the drug-trade are stringent just now owing to the difficulties of carriage. War-rumours are beginning to affect business, but nothing except glycerin has been materially changed so far.

Heavy Chemicals.

There is little this week that calls for any special comment in the heavy-chemical market. The amount of business passing continues fairly good, and values all round are much about the same as lately quoted. The demand from home consumers keeps well up to the mark.

ALKALI PRODUCE.—Bleaching-powder tends lower still. Caustic soda is fairly good demand at figures nominally unchanged, but the tendency is on the easy side. Forward business is being put through on lower terms. Chlorates of potash and soda and yellow prussiate are firm at late figures.

COAL-TAR PRODUCTS.—Carbolic acid, crystals and crude, are moving fairly well, and prices keep steady; crude, 60 per cent., 1s. 11d.; 75 per cent., 2s. 4d./per gallon; crystals, 34-35° C., 6½d. and 39-40° C., 6½d. to 6¾d. Anthracene very quiet; nominal figures are 4d. and 3d. for A and B grades respectively. Pitch is somewhat quiet, but value is steadily maintained at 25s. to 25s. 6d., f.o.b. East Coast. Naphthas are dull and a shade lower; crude, 30 per cent., 3d. to 4d.; solvent naphtha, 95 per cent., 1s. 4d., and 90 per cent., 1s. 2d. Solvent wood, colourless, 3s. to 3s. 3d. per gallon; miscible, 4s. 1d. to 4s. 3d. Creosote very firm at 2s. 6d. to 2s. 11d. Refined tar, 11s. to 11s. 6d. per gallon. Toluol, 1s. 1d. to 1s. 1½d. Aniline oil, 4 d. to 4½d., and aniline salts 4d. to 4½d. per lb. Benzols have taken a rather firmer tone again, and quotations show an advance over those mentioned last week; figures are now: 90 per cent., 9d., and 50 per cent., 9d.

SULPHATE OF AMMONIA.—Firmer, and 97. 12s. 6d. is about the figure at all ports. 459 tons were exported from Leith last week.

SULPHATE OF COPPER.—Dearer. Anchor, 18s. 10s.; Liverpool, 18s.; and spring shipment, 18s. 10s.

NITRATE OF SODA.—Firmer, ordinary, 7s. 9d.; and refined, 8s.

CREAM OF TARTAR.—Firmer; best white, powdered, 73s.; and crystals, 71s.

GREEN COPPERAS.—In heavy demand, and price tends higher.

BORAX AND BORACIC ACID.—Firm. Crystals, 14s. and 23s.; and powdered, 14s. 6d. and 25s. respectively.

London Drug Statistics.

The following statistics relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses from January 31, 1898, to October 31, and to the stocks on October 31. Their accuracy cannot be guaranteed.

	October		Stocks, Oct. 31		Imptd. to Oct. 31	Delivd. Oct. 31
	Landed	Delivd.	1898	1897		
Aloes	cs	172	197	2,919	2,917	1,965
"	gourds	—	—	3,708	1,874	3,528
Anise, star	cs	—	50	5	125	90
Balsams	pkgs	262	76	546	413	1,502
Calumba	bgs	—	416	491	59	2,507
Camphor	pkgs	330	253	9,258	11,475	2,426
Cardamoms	"	291	415	1,395	494	4,362
Cinchona	"	1,843	2,659	20,731	19,630	23,176
Cubeb	bgs	—	54	1,869	472	1,632
Dragons' blood ..	cs	13	15	21	94	80
Galls	"	21	971	4,523	4,590	6,578
Guars—						
Acacia	pkgs	2,124	2,558	9,850	13,444	13,620
Ammoniacum	"	15	—	74	32	73
Aniini & copal "	"	894	2,925	16,509	19,945	30,252
Asafetida	"	195	54	448	438	609
Benzoin	"	61	315	2,566	2,911	3,435
Damar	"	224	611	3,165	2,609	4,874
Galbanum	"	—	—	—	1	1
Gamboge	"	55	13	358	296	233
Guaiacum	"	4	4	85	82	125
Kino	"	—	4	37	19	40
Kaari	tons	332	347	612	873	2,491
Mastic	pkgs	—	—	8	3	46
Myrrh	"	20	41	457	583	146
Olibanum	"	—	645	3,055	1,189	5,408
Sandarac	"	74	215	971	837	1,233
Tragacanth	"	249	667	1,192	3,268	5,084
Ipecacuanha, Rio bls	"	33	56	120	286	38
" other kinds	"	29	27	27	13	226
Nux vomica .. pkgs	"	116	41	361	150	585
Oils—						
*Anise	cs	132	18	252	132	202
*Cassia	"	—	1	78	96	30
Castor	cks	125	44	143	90	630
"	cs	70	96	366	371	869
Coco-nut .. tons	"	86	199	114	188	1,029
Olive	pkgs	260	273	829	890	2,237
Palm	tons	—	1	13	12	22
†Quinine sulphate lbs	"	4,905	5,690	107,477	\$2,309	54,664
Rhubarb	chcts	623	110	1,547	889	1,816
Sarsaparilla .. bls	"	95	128	331	224	1,171
Seuna	"	1,113	866	1,635	1,373	4,495
Shellac—						
Button	cs	706	996	5,534	7,172	6,803
Garnet	"	212	1,206	5,444	5,674	7,711
Orange	"	279	3,900	37,875	33,082	26,430
Turmeric	tons	9	52	306	490	268
Wax, bees' .. pkgs	"	647	461	2,742	3,077	5,733
" Japan	"	50	116	445	166	925

* Stocks of aniseed and cassia oils lying at Smith's Wharf and Brewer's Quay are not included in this return.

† Includes the quantity at Red Lion, Bull, and Smith's Wharves; also the Docks.

Cablegrams.

HAMBURG, November 3, 12.17 P.M.:—No important changes since my letter. Turpentine oil is dull at 53m. per 100 kilos., refined camphor has become a little easier, to-day's quotation being 250m. per 100 kilos. for bells. Ergot of rye is getting scarce, and is not to be had under 180m. per 100 kilos. for last year's stuff.

* * * * *

NEW YORK, November 3, 2.52 P.M.:—A brisk business is doing. Jalap is a strong market at 14c., and balsam tolu has advanced to 33c. per lb. Sound Russian ergot is scarce at 30c., and pareira brava at 10c. Cocoa-butter is lower at 31c., and St. Vincent arrowroot has been advanced to 9c. per lb.

* * * * *

AMSTERDAM, November 3, 4.55 P.M.:—At the auctions held here to-day a total of 634,467 kilos. of Java cinchona-bark was offered, consisting of 527,163 kilos. manufacturers' and 107,304 kilos. druggists' bark. The weight of quinine sulphate in the bark was 27,941 kilos. and 2,502 kilos. respectively. Practically all sold, at an average unit of 4.67 per half-kilo. for the manufacturing bark, against 4.05c. paid at the September auctions. The following were the purchases:—American and English factories, who bought the equivalent of 5,524 kilos.; the Auerbach factory, 0 kilos.;

the Brunswick factory, 5,805 kilos.; the Amsterdam and Mannheim works, 8,880 kilos.; the Frankfort-on-Main and Stuttgart works, 5,674 kilos.; and various buyers, 3,227 kilos. The prices paid for the manufacturing bark ranged from 6 $\frac{1}{2}$ c. to 45c. per kilo, and from 8 $\frac{1}{2}$ c. to 99c. for druggists'. The tone throughout the auctions was firm.

Liverpool Drug-market.

Liverpool, November 2.

CASTOR OIL.—The market is in a very uncertain mood, large sales of French having been made in anticipation of troubles with France, but this has not inspired the dealers with very much confidence, and sales are still being made at prices varying from 2 $\frac{1}{2}$ d. to 3d. for first-pressure French, while the former price is asked for second-pressure French. Good seconds Calcutta are somewhat easier, at 3 $\frac{1}{2}$ d. per lb., from the quay, out of parcels recently arrived.

GUM ARABIC SORTS.—A market can hardly be said to exist, as stocks have been so much reduced that if the entire stock in first hands were sold the transactions would hardly be worth recording. A few bales of soft sorts are offering at 75s. per cwt. Of Niger and Brazilian sorts there are still good stocks at rates lately current.

CANARY-SEED.—Nothing has transpired to vary the monotony of the ebb and flow in this article. There are sellers of good bright Turkish at 28s. 6d. to 29s. per quarter.

CREAM OF TARTAR is offering at prices which range from 72s. to 80s. per cwt., according to grade, but very little B.P. offers on the spot at the moment.

HONEYS are all steadily improving in position. Reports from California continue to confirm the truth of the reports of short crop, and Chilian and Peruvian honeys are all hardening in price sympathetically. Sales are reported of Pile X. Chilian at 30s., and Pile I. at 28s. per cwt., both figures being an advance on prices previously paid.

SPERMACETI, CHILIAN, is held for 1s. 3d., though holders might be induced to shade this price slightly.

BEESWAX.—The demand has eased off a little, and sales have been of a retail character.

CHILLIES, SIERRA LEONE, are still in good demand, and 40s. is now asked for good bright, and 37s. 6d. for fair. Stocks available are now very small, and the new cannot arrive for some months.

QUILLIAIA-BARK has evinced greater firmness, and sales are reported at 187. 5s. in quantity as imported.

GUINEA-GRAINS.—50s. is reported as having been paid for a small parcel of 5 bags. Stocks on this market are now practically *nil*.

German Drug-market.

Hamburg, November 1.

Business in general is very quiet here, and there is little doing in our drug-market just now.

ANISE, RUSSIAN, is steady, at 30m. per 100 kilos. for new crop. **STAR-ANISE** is very firm and dearer, 280m. per 100 kilos. being asked to-day.

CASSIA LIGNEA is firm; new Standard is offered at 88m. per 100 kilos.

CINNAMON-CHIPS are very scarce, and show a strong demand for prompt delivery.

CAMPHOR, REFINED is unchanged, at 255m. per 100 kilos.

CASCARA SAGRADA is firm and dearer, to-day's quotation being 47m. per 100 kilos.

COCA-LEAVES.—Bolivian are quoted at 160m. per 100 kilos.

ERGOT OF RYE is firmly held at 160m. to 180m. per 100 kilos.

IPECACUANHA is very firm and scarce at unchanged rates.

LYCOPodium—225m. to 230m. per 100 kilos.

QUILLIAIA-BARK is firmer, at 35m. per 100 kilos.

QUININE.—Steady, at 26 $\frac{1}{2}$ m. to 27m. per kilo.

WAX, JAPAN, is very firm, at 67m. per 100 kilos.

OILS.—Castor is very scarce; stocks of first-pressing are almost exhausted, and none can be bought below 56 $\frac{1}{2}$ m. per 100 kilos. to-day; December shipment is offering at 54m. per 100 kilos. in barrels. Cod-liver shows very little business; non-congealing oil is 78m. to 80m. per barrel.

American Markets.

New York, October 25.

The drug-market has been fairly active during the past week and quotations are generally steady with changes in favour of holders. Dealers generally report good business and an excellent winter outlook.

ALOES, CURACOA.—All arrivals have been promptly taken up and stocks are now somewhat light. Values are firm at 3c. to 3 $\frac{1}{2}$ c. per lb.

BALSAMS COPAIBA is slightly firmer, and for primo central American 38c. to 39c. per lb. is asked. An arrival of 20 packages is held at 36c. Sales of Para are reported from first hands at 39c., and 43c. to 44c. is now the spot quotation for prime quality. *Tolu* is dull, and quotations are nominal at 33c. *Peru* is steadily held at \$1.95 to \$2.

BARKS.—*Angostura* is scarce, at 6 $\frac{1}{2}$ c. to 7c. per lb. *Bayberry*: Reports indicate a very small crop. At present 3 $\frac{1}{2}$ c. to 4c. will buy in small quantity, and for ton lots holders ask the equivalent of 18s. per cwt. *Cascara sagrada* continues in a very strong position, and 6c. to 6 $\frac{1}{2}$ c. is the current quotation for two-year-old bark. Holders on the coast are very firm. For new-crop spot dealers ask the equivalent of 28s. f.o.b.

CANNABIS INDICA.—Very scarce, and quotations have advanced to 15c. for prime quality.

COCA-LEAVES.—Advanced in consequence of export demands, and 12c. is now the inside figure for Truxillo; 19 to 21c. is asked for Huanuco.

ERGOT.—Prices have rapidly advanced, and 22c. is now the lowest quotation for ordinary Russian, and holders are not anxious sellers.

GOLDEN SEAL (*Hydrastis*) is very unsettled. It is certain that the new crop has been large, but holders refuse to accept less than 45c., and as manufacturers have stocked up, and are content to wait, lower prices are anticipated. Meanwhile the spot market is firm, and up to 47c. to 48c. has been paid for small lots.

HONEY.—Further advanced, and prime grades are not procurable. The new crop is of poor quality, and prices are from 2c. to 3c. per lb. higher than last year. For prime white Californian the equivalent of 39s. 6d. per cwt. is asked, and for bright amber 35s.

JALAP.—Scarce and firm, at 12c. to 12 $\frac{1}{2}$ c.

OPIUM is weak and as the demand is very light prices have declined. Case lots can be bought at \$3.50, and \$3.52 $\frac{1}{2}$ to \$3.55 is the general quotation for broken lots.

SARSAPARILLA.—Reports from Mexico indicate no stocks, and the position of Mexican root is strong; 8 $\frac{1}{2}$ c. is asked for prime Tampico. The demand is good and offering are limited.

SENEGA-ROOT.—New crop is firmly held in the West, and dealers expect higher figures. The spot market is comparatively easy in view of the light demand, and 24 $\frac{1}{2}$ c. to 25c. will still buy.

London Markets.

ACID, CITRIC.—Slightly easier, at 1s. 1 $\frac{3}{4}$ d. to 1s. 2d., the latter figure being the maker's price.

ACID, TARTARIC.—English on the spot is 1s. 0 $\frac{1}{2}$ d. to 1s. 0 $\frac{3}{4}$ d., and foreign 1s. to 1s. 0 $\frac{1}{4}$ d. per lb.

AGAR-AGAR.—The value of sound is 1s. 5d. to 1s. 6d. per lb. according to colour.

ALOES, CAPE—Business has lately been done at 26s. for fine, bright hard. Some 57 packages are likely to be brought forward at the next drug-auctions.

ALOIN.—Soluble is obtainable at 1s. 11d. per lb. c.i.f., or 1s. 8d. in 100-lb. lots.

AMBERGRIS.—Black of fair colour has sold at 25s. per oz.

ARROWROOT.—Very firm. Business has been done this week at 2 $\frac{1}{2}$ d. to 2 $\frac{3}{4}$ d. per lb. for ordinary St. Vincent.

ARSENIC.—Best white English powder is quoted at 17l. 10s. per ton *ex ship*.

BALSAM COPAIBA.—The following c.i.f. prices are to hand this week: Maranham, thin Para, and Angostura, 1s. 11d.; Cartagena and Maracaibo, 1s. 9d. per lb.

BELLADONNA-ROOT—Steady at 38s. to 40s. per cwt. c.i.f. for good, and 33s. to 34s. for chumpy and rough.

BORAX.—Firmer, although without quotable change. Crystals cannot be had under 14s. per cwt. The current prices only apply to immediate delivery, and orders for 20 tons, but for future delivery, at the above figures have been refused.

CAMPHOR—Little business doing in crude owing to the extreme prices asked. Cables from Japan quote 110s. per cwt., c.i.f., but there are no buyers above 100s. Chinese is 97s. 6d., c.i.f., without buyers. Business has been done by the Syndicate at 107s. 6d. on the spot for Japanese, but other holders ask 112s. 6d. per cwt. Refiners have been discussing the advisability of raising the prices of their product owing to the stringent condition of the crude article, and although nothing has yet been decided an early advance is anticipated. One refiner refuses to book orders for less than 1 ton, at 1s. 3 $\frac{1}{2}$ d. per lb. in bells, and the German refiners point out that the crude article is relatively 12 per cent. higher than the refined.

CANELLA ALBA.—The New York market is bare of stock, and the quotation is nominal at $3\frac{1}{2}$ d. per lb., c.i.f. terms. Supplies from the Bahamas are, however, expected in the course of three or four weeks.

CINCHONA.—The exports from Ceylon from January 1 to October 11 were:—

	1898	1897	1896	1895
Lbs.	749,988	599,346	887,094	813,577

The bark-shipments from Java during October, 1898, have been 969,000 Amst. lbs., against 735,000 in 1897, 862,000 in 1896, 1,100,000 in 1895, 952,000 in 1894, and 349,000 in 1893. Total, January to October: 1898, 8,895,000; 1897, 6,791,000; 1896, 8,280,000; 1895, 6,929,700; 1894, 7,577,000; 1893, 6,225,000 Amst. lbs.

COCOA-BUTTER.—Steady and unchanged in auction, 65 tons Cadbury's brand selling at $13\frac{1}{2}$ d. to $13\frac{1}{4}$ d. per lb. At Amsterdam, on November 1, 70 tons Van Houten's sold at $66\frac{1}{4}$ c. to $72\frac{1}{2}$ c.; 15 tons Helm, at $66\frac{1}{2}$ c. to 67c.; 10 tons Hamer, at $66\frac{1}{4}$ c. to 67c.; and 10 tons Suchard, at 69c.

CREAM OF TARTAR.—Quiet, at from 73s. to 80s., the latter figure for B.P. quality.

CUBEBS—Sales are reported of ten-bag lots at 24s. per cwt.

DAMIANA-LEAVES—New-crop Californian is offered at 7d. per lb., c.i.f.

ERGOT.—The demand has slackened, but last week's prices are maintained. There is no further prospect of new crop coming forward, and none offering on this market.

GALLS.—Blue and green Persian have been in active demand, and a considerable business has been done at higher rates—viz., 54s. to 57s. 6d. for blue, and 49s. to 50s. for green. All kinds are scarce and wanted. Holders of blue Smyrna are asking higher prices, but no business has transpired. Chinese have been in small request, at 55s. to 56s. per cwt. for fair on the spot.

GLYCERIN.—Distillers have been exceptionally brisk of late, and a large amount of business has been done in dynamite and chemically-pure glycerines. War-preparations are not likely to permit any early reduction in the price—indeed, the demand on account of smokeless-gunpowder makers is steadier than the supplies. B.P. 1250 glycerin English makes are selling at 50s. 10s. per ton in cases, and foreign makes 52s. 10s. to 53s.

GUM ARABIC.—Persian gums have been selling very freely during the past fortnight, two arrivals of 1,200 cases having been cleared at 20s. to 23s., but another 1,000 cases are coming forward, and it is expected that they will be cleared out immediately. Most Persian produce is getting scarce here owing to the indisposition of carrying steamers to call at Persian ports because the wheat crop there has been deficient, and other produce is simply taken to fill up.

GUM MASTIC.—A new arrival of fine pale tears has come to hand this week, for which 2s. per lb. is asked.

HONEY.—Fine-set white Italian has been getting scarce lately, and 33s. to 34s. per cwt., c.i.f., is asked. Old is obtainable at 33s. on the spot.

IPECACUANHA.—Since our last Rio root of good quality—i.e., bold and well-annulated—has sold at 10s. 1d. to 10s. 2d. per lb.; only thin wirey root, with a considerable proportion of stem, is obtainable at the low rates ruling at last week's auctions. Business has been done in Cartagena at 7s. 6d. per lb.

JALAP.—Reports from the other side indicate that it is unlikely any more will come forward from Mexico, and higher figures are looked for. Second-class damaged has sold at 6d. per lb., and sound at $6\frac{1}{4}$ d. to 7d.

KAVA KAVA.—The New York market is practically bare of stock, and $7\frac{1}{2}$ d. per lb. c.i.f. is asked for forward delivery.

KOLA-NUTS.—At the spice-auctions, one barrel and four boxes Grenada sold at 3d. to $3\frac{1}{4}$ d. per lb.

LEAD ACETATE.—The convention have reduced their price by 1s. per ton, the quotation in 5-ton lots, ex-ship, now being 25s. c.i.f., or 26s. in less quantities.

MEBCURIALS.—A considerable volume of business has been done recently, so that the 5s. per bottle added to quick-

silver is not likely to affect the price of mercurials, especially as the advance in mercury comes two days after a decline in its salts.

OIL, CASTOR.—Good business is doing in Belgian, and orders for forward delivery are booked at 6d. per cwt. under our last quotations. Medicinal Italian is quiet at $4\frac{1}{2}$ d. per lb. on the spot, which figure has been paid. French first-pressing is easier at 27s. 9d. in barrels spot. Largo arrivals of East Indian have depressed the market, and firsts are obtainable at $3\frac{3}{4}$ d. per lb. on the spot in cases.

OIL, CITRONELLA.—Easier, at $11\frac{1}{2}$ d. per lb., in drums, on the spot. The shipments from Ceylon from January 1 to October 11 were:—

	1898	1897	1896	1895
Lbs.	1,174,205	Lbs.	Lbs.	Lbs.
	893,659		889,328	856,618

OIL, CLOVES.—Cheaper; 3s. 1d. per lb. being the distillers' price.

OIL, COD-LIVER.—Our Bergen correspondent, writing on October 29, reports that the market remains dull, with a rather weaker tendency, at 73s. per barrel, f.o.b. terms, for best Lofoten non-congealing medicinal oil. The exports from Bergen up to date have been 7,037 barrels, against 8,953 barrels at the corresponding period of last year. Business in London has been steady in some quarters and non-existent in others, sales being made at 80s. to 85s. per barrel, c.i.f., for Norwegian medicinal. There has been better inquiry on the whole, and we hear that American buyers are beginning to secure the winter's supplies.

OIL, OLIVE.—Messina advices to hand this week report that the gathering and pressing is now in operation, and that there is not likely to be a curtailment of the yield. Levant advices (Candia) speak favourably of the new crop, and from Smyrna and districts also good reports come. The olives appear sound, and it is expected quality will be good.

OIL, PEPPERMINT.—Japanese dementhrolised is quoted for forward shipment at 3s. $7\frac{1}{2}$ d. c.i.f.; and 40 per cent. rather firmer at 4s. $7\frac{1}{2}$ d. American HGH is without change, at 5s. $4\frac{1}{2}$ d. per lb. on the spot, with little doing. J. B. Horner's "pure" is selling at 3s. 3d., and "first premium" at 4s., while H. & P. is quoted 4s. 6d. per lb.

OIL, TURPENTINE.—has declined 3d., owing to pressure to sell, 26s. 6d. being now the price for American on the spot.

OILS, FIXED.—Cocoanut is firmer, at 24s. 9d. to 25s. in pipes, for Ceylon, spot, and Cochin 28s. Rape firm, at 24s. for refined, on the spot, and Ravigon 19s. 6d. Cotton quiet, at 15s. to 16s. for refined, in casks. Petroleum quiet: spot, American, 6s. 4d.; water-white, 7s. 4d.; Russian, 5s. 4d. to 5s. per gallon.

OPIUM.—Firmer all round. In soft-shipping a large amount of business has been done for export, at advanced prices, from 12s. 6d. to 14s. being now asked. There has also been a better demand for druggists' and manufacturing descriptions. Persian, too, has been going off more rapidly, at from 10s. 6d. to 11s. 9d. on the spot, according to quality. For arrival, small sales have been made at previous rates.

SMYRNA, October 22.—The only transaction to be noted this week is 2 cases Karahissar talequale, at the parity of 10s. 4d. per lb., c.i.f. European ports. Other buyers have appeared on the market, asking for a slight reduction in the latest prices, which was not granted. The arrivals up to date have been 1,027 cases, against 2,740 at the same time of 1897. The last rainfalls have quieted the excitement among holders of large stocks, but it must not be forgotten that opium is an article which falls gradually, and is subject to unforeseen influences. We hear that the present crop of Persian is estimated at about 3,000 cases, which may help to maintain moderate rates.

CONSTANTINOPLIS, October 28.—The sales for the week amount to 20 cases Holland "visita," at the parity of 10s. 10d. per lb., f.o.b. Prices have receded slightly since our last report, and the market may be said to be less firm than last week. We do not, however, expect to see any appreciable fall in prices at present. Konia reports that no seed has yet been put underground, as peasants are looking for more rain, of which there are no signs at present.

ORRIS.—Steady at unchanged rates. Reports from Leghorn intimate that French buyers have been good customers on that market lately, owing to present low prices.

POTASH CYANIDE is $11\frac{1}{2}d.$ per lb. for 1899 delivery.

POTASH PERMANGANATE.—A limit to the cutting powers has been reached, for the principal manufacturers are now refusing orders for next year at less than 48s. 6d. per cwt. for large contracts, although it is still possible to buy odd lots of a fraction of a ton at easier rates.

QUICKSILVER.—Dearer, Rothschilds having put up the price to-day to 7l. 10s. per bottle; second hands, 7l. 9s.

QUININE.—The shipments of quinine from Java from August 1 to August 31 were 248 cases, of which 100 went to Amsterdam, 98 to London, and 50 to New York.

ROSE-LEAVES.—Dutch firm at 2s. 4d. per lb. spot.

SAFFRON.—The coming crop is reported to be very good, and unless the flowers are nipped by frost the supply available later will bring down prices. Quotations unchanged.

SARSAPARILLA.—Good Jamaica has been cleared out in one quarter at 1s. 8d., and we believe there is little remaining in first bands. Lima is still to be had at 1s. 2d. per lb.

SENNA.—Business has been done in a small way at $2\frac{1}{2}d.$ to $2\frac{1}{2}d.$ per lb. for small yellow Tinnevelly leaf, $1\frac{1}{2}d.$ for pods, and $4\frac{1}{2}d.$ for Alexandrian pods. At the auctions next week 75 bales of Tinnevelly only will be offered from importers' hands.

SHELLAC.—A auction a good demand prevailed and the bulk sold, second orange at higher rates, fair TN being quoted at 65s. The following prices were paid:—Second orange, pale curly, 73s. to 78s.; fine palish, 68s. to 69s.; blocky to good bright reddish, 65s. to 67s.; fair reddish, part blocky, 64s. to 65s.; weak red ditto, 63s. to 64s.; ordinary cakey red, 62s. to 63s.; flint block, 59s.; and common weak red livery, 58s. per cwt. Button, genuine native blocky, 84s.; good firsts, 72s. to 75s.; and ordinary seconds, 66s. to 69s. per cwt. Garnet sold without reserve at 53s. for flint block, and low dark ditto 47s. to 48s. per cwt.

SPICES quiet and unchanged, with the exception of Pimento, which continues to rise in price. At auction on Wednesday Cochin Ginger was steady: fair washed rough sold at 23s. to 23s. 6d. per cwt.; good cuttings, at 14s. per cwt.; and C cut, at 58s. per cwt. Jamaica mostly sold at firm prices: Rataoon, at 65s.; common lean to middling washed, 68s. to 78s.; and bold, at 95s. per cwt. Bengal dearer, 20s. per cwt. is being paid privately. Japan steady at 18s. 6d. to 20s. 6d. per cwt. for ordinary to good smooth, with small sales thereof. Pimento dearer: ordinary sold in sale at 4 $\frac{1}{2}$ d., and good clean at 4 $\frac{1}{2}$ d. per lb.; and privately a good business has been done during the week at 4 $\frac{1}{2}$ d. to 4 $\frac{1}{2}$ d. for fair. Zanzibar Chilli firm: the parcels offered were bought in at 40s. per cwt.; a few cases of fine picked Japan sold at 45s. per cwt. Dull to fair Sierra Leone capsicums sold at 29s. to 29s. 6d. per cwt., and Natal at 65s. to 70s. per cwt. Zanzibar Cloves have fluctuated very slightly, closing at about last week's rates—January-March delivery, at 3 $\frac{1}{2}$ d. per lb. None offered at auction. A string of unpicked Penang sold at 4 $\frac{1}{2}$ d. to 4 $\frac{1}{2}$ d. per lb.; good picked realised 9 $\frac{1}{2}$ d. to 10 $\frac{1}{2}$ d.; and fine, 1s. per lb. Nutmegs lower, 66s. sold at 2s. 4d. to 2s. 5d. per lb. Mace dull; good palish red sold at 1s. 9d. per lb. Cinnamon sold at 8 $\frac{1}{2}$ d. per lb. for quillings; and at 5 $\frac{1}{2}$ d. per lb. for barky chips. Pepper quiet and steadier owing to shipments being small; Tellicherry black sold at 4 $\frac{1}{2}$ d. per lb.; and small dusty black Lamprey at 4 $\frac{1}{2}$ d. per lb. Fair to good Singapore white sold at 7 $\frac{1}{2}$ d. to 9 $\frac{1}{2}$ d. per lb., and dull Penang at 7 $\frac{1}{2}$ d. per lb. Cassia-lignea bought in at 56s. per cwt. for old import, and at 44s. for common new. Good Natal Arrowroot bought in at 5 $\frac{1}{2}$ d. per lb.

SUGAR OF MILK.—For pure white American powder 52s. 6d. is said to have been paid this week; second quality is quoted at 47s. per cwt. c.i.f.

TARAXACUM ROOT has been in more inquiry at 35s. per cwt. c.i.f.

THYMOL.—Higher, one of the agents has advanced his price to 7s. 6d. or 8s. per lb. Others talk of 7s. to 7s. 2d., but have none to offer.

TRAGACANTH.—A large business has been done for export, some 350 packages having changed hands at full to dearer rates. The stock is now in very small compass and prices are likely to remain firm. Persian firsts are now

quoted at 13l. 10s. to 14l. 10s., seconds 12l. to 12l. 10s., thirds 11l. to 11l. 5s. and fourths 8l. to 10l. 5s. per cwt.

WAX, BEES'.—At the spice-auctions 18 barrels and 2 cases Jamaica were sold at 6l. 10s. to 6l. 12s. 6d. per cwt.

WAX, JAPAN.—Quiet, but firm, with sales at 32s. per cwt. on the spot. Advices to hand this week from Japan look for firmer prices, and 33s. c.i.f. is asked. The Hamburg market remains very firm.

Coming Events.

We insert notices of association and society meetings in this section free if they are sent to us, on postcards, by the Wednesday of the week before the meetings are to be held.

Monday, November 7.

Dewsbury and District Chemists' Association. Meeting at the Town Hall at 8 o'clock, when Mr. W. S. Glyn-Jones will reply on the Beecham's pill question as propounded by Mr. Beecham's representative.

Society of Chemical Industry (London Section). First meeting of the session, at the Chemical Society's Rooms, Burlington House, Piccadilly, at 8 P.M. The following are the papers to be read:—"On a Central American Lignite, soluble in Benzol," and an Exhibit of Miike Coal with Shale and Fossils, by Mr. Watson Smith; "A New Method for Determining the Melting-point of Fats and Waxes," and "Indian Edible Oils," by Messrs. A. W. Crossley and H. R. Le Sueur; Exhibit of New Filling Material for Reaction Towers, by Mr. O. Guttmann; "The Causes of Stench in Beer," by Mr. G. H. Morris; "The Manufacture of Pig-iron in India," by Mr. H. Harris.

Pharmaceutical Society of Ireland, 67 Lower Mount Street, Dublin. Opening evening meeting at 8.15 P.M. Election of officers and other important business will be transacted.

Tuesday, November 8.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, W.C. Evening meeting at 8 P.M. Professor Wm. Ramsay, F.R.S., will lecture on "The New Gases of the Atmosphere."

Glasgow and West of Scotland Pharmaceutical Association, 94 West Regent Street, at 9 P.M. Discussion on the Pharmacopeia, opened by Mr. T. Dunlop.

Wednesday, November 9.

Manchester Pharmaceutical Association, Victoria Hotel, at 7.30 P.M. "Standardisation Processes of the B.P.," by Mr. J. H. Hoseason; "Pharmacy of the B.P.," by Mr. J. Grier; "Vegetable Materia Medica of the B.P.," by Mr. W. Kirby.

Midland Chemists' Assistants' Association, Birmingham, in the Exchange Rooms, at 9 P.M. "Health and Occupation," by Mr. J. F. Liversedge.

Newcastle-on-Tyne and District Chemists' Association, Hôtel Métropole, West Clayton Street, at 8 P.M. "Practical Demonstration in Radiography," by Mr. T. Maltby Clague.

Thursday, November 10.

Chemists' Assistants' Association, 73 Newman Street, W., at 9 P.M. "The Biology of Yeast," by Professor J. Reynolds Green.

Friday, November 11.

Cambridge Pharmaceutical Association. Annual Meeting at 9.15 P.M., at Dale's.

Chemical Society.—Banquet to Past-Presidents at Hôtel Métropole, Friday, November 11. Tickets, 1l. 1s. each, can be obtained from the Assistant-Secretary, Burlington House, W.

Pharmaceutical Society of Great Britain (North British Branch).—Dr. Ralph Stockman, Professor of Materia Medica and Therapeutics in the University of Glasgow, will open the session on Wednesday, November 23, with a lecture on "Arrow-poisons."

Metropolitan College of Pharmacy.—Fifth annual dinner at the Holborn Restaurant, Saturday, November 26. The medals and certificates to successful students will be distributed after dinner. Dr. F. B. Power, F.C.S., director of the Wellcome Research Laboratories, will preside.

The Western Chemists' Association (of London).—Eighth annual dinner will be held on Wednesday, November 16, at the Café Royal, 68 Regent Street, at 7 P.M. The retiring President (Mr. J. H. Mathews) will take the chair. Tickets 7s. 6d. each (exclusive of wine), can be obtained from the Honorary Secretaries, Mr. H. Cracknell, 17 Craven Road, W., and Mr. W. J. I. Philp, 34 High Street, Notting Hill, W.



IRISH SUPPLEMENT TO THE CHEMIST AND DRUGGIST

SECOND YEAR.

SATURDAY, NOVEMBER 5, 1898.

No. 23.

42 CANNON STREET, LONDON, E.C.,

November 3, 1898.

THE annual meeting of the Pharmaceutical Society of Ireland is fully reported in this issue. It will be seen from our report that company-pharmacy was prominent at the meeting, and were it possible to make two factions of Irish pharmacists, undoubtedly anti-companists and pro-companists would be their titles. Company-pharmacy is a serious enemy. It is not yet at its worst form in Ireland, and perhaps it is a wise policy to harass it whenever and wherever it is possible. This, we take it, is the basis of the fierce opposition manifested against such companies as Rattan's, of Belfast, and Hayes, Conyngham & Co., of Dublin. These companies are essentially organisations of pharmacists, as are Allen & Hanburys or Southall Brothers & Barclay, and the reason why the Society has gone for them, the Irish President says, while we have to fight companies all, we must fight them all. Anyway, the pro-companists were beaten at the poll, and Mr. Hayes (an ex-President of the Society) and Mr. Conyngham (a member of the council) were unseated.

* * * *

The opposition to company-pharmacy was also extended to the Law Courts, and since our last issue THE CHEMIST AND DRUGGIST has contained several reports of cases, but not all connected with companies. The following briefly summarises the points in them:—

David Mansen, assistant to the Ulster Chemists' Company (Limited), Peter's Hill, was fined 5*l.* at the Belfast Summons Court, for selling a compounded medical prescription containing a poison. No evidence of compounding was brought forward, and a second case, charging the defendant with compounding, was withdrawn.

James Hogg, chemist and druggist, York Street, Belfast, was at the same time fined 5*l.* for selling a compounded medical prescription. Mr. Samuel Hogg, L.P.S.I., his son, declared that it was he who compounded the prescription, and that he shared the profits of the business. The prosecution did not attempt to refute this, contenting themselves with showing that James Hogg was the owner of the shop in which the prescription was compounded and sold.

Hugh McIntyre, an unregistered assistant to Messrs. John Larke & Co., registered druggists, Victoria Street, Belfast, was fined 5*l.* for selling poisons.

Emma Barnes, 1 Charlemont Street, Dublin, was summoned under three counts—selling opium, compounding a prescription, and keeping open shop for the same. On the declaration of Mr. C. B. Vance, L.P.S.I., that he paid the rent of the shop, the summonses were withdrawn.

J. Waters & Sons (Limited), Cork, use the description "dispensing chemists," although they are not registered

pharmaceutical chemists or chemists and druggists. The Society prosecuted on three counts, and the Cork Resident Magistrate heard the evidence, also the argument that this was a case covered by the House of Lords decision, and the decision in the Court of Queen's Bench in Ireland in the case of the Pharmaceutical Society of Ireland *v.* Boyd & Co., Lisburn. The Magistrate took a few days to consider the case, and decided against the Society.

In connection with the last case, we may state that before it was heard the company had announced that they had procured the services of a pharmaceutical chemist in order that they might compound prescriptions.

* * * *

The winter session is again upon us, and already in Great Britain several societies have made a good start with their evening meetings. The Pharmaceutical Society of Ireland made a start on Monday evening of this week, when Professor Tichborne read his paper on "The British Pharmacopœia, 1898," which he was prevented, by non-publication of the work, from reading last session. The paper is printed in THE CHEMIST AND DRUGGIST of this date. Professor Tichborne was a member of the Pharmacopœia Committee, and his is the first important public utterance on this subject to pharmacists by a member of the General Medical Council. At Belfast Mr. Martindale spoke as a member of the Pharmaceutical Committee, and at the Edinburgh meeting of the British Medical Council Professor Leech, now Chairman of the Pharmacopœia Committee, spoke on Dr. McWalter's paper; so that Professor Tichborne's remarks have special interest to the drug-trade. The paper is printed in the C. & D. of this date.

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The Irish Pharmacists' Assistants' Association resumed its meetings on October 21. This was the third annual meeting, and, after the satisfactory annual report was adopted, Mr. Henry Hunt was appointed President, Mr. J. T. Turner Vice-President, Messrs. Savage and Jessop Hon. Secretaries, and Mr. W. McCarthy Hon. Treasurer. We report the meeting in this issue.

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THE CHEMISTS' AND DRUGGISTS' DIARY for 1899 will be ready for distribution before the next issue of this Supplement. We present a copy of it free to every subscriber to THE CHEMIST AND DRUGGIST. All members of the Irish Societies who get the C. & D. will get a copy of the DIARY, and we may tell those who do not subscribe that now is a good time to begin, as all subscriptions in force in 1898 carry with them a copy of the 1899 DIARY. Ten shillings is the subscription.

Pharmaceutical Society of Ireland.

I. Annual Meeting.

Election of Members of Council and Presidential Review.

II. Dinner of the Members.

III. Council Meeting and Election of Officers.

ON Monday evening, October 3, the annual meeting of the members of this Society was held at 67 Lower Mount Street, Dublin, at 7.30.

The REGISTRAR (Mr. Ferrall) read the minutes of the last annual meeting, which were confirmed.

The Vice-President was nominated by the PRESIDENT, and Messrs. Gibson, O'Connor, and Porter by the meeting, as scrutineers of the ballot.

While the scrutiny was being taken some discussion took place on

THE ANONYMOUS CIRCULAR.

Mr. GRINDLEY: I rise to bring under the notice of the meeting a matter which intimately concerns me and others who are up for election. An anonymous circular has been sent out to the voters of the Society purporting to be from the "Pharmaceutical Society of Ireland, Dublin, Lower Mount Street, September, 1898; Council Election"; and at the end it recommends the members to vote for myself and other gentlemen. I wish in the strongest language that I can command to repudiate all knowledge of, sympathy with, or hand, act, or part in this circular.

Mr. ROBINSON: I think the opportunity that has been afforded to Mr. Grindley has been very well taken advantage of by him. No one that knows him would accuse him of any act or part in it. But I regret the officers of the Society did not think it their duty to repudiate this scurrilous and slanderous thing.

The VICE-PRESIDENT: Mr. Robinson, I may mention that if I had got the circular I would have decidedly repudiated it through the press, but, unfortunately, I did not get it until I came here to-night.

Mr. KELLY: As one of those named in the circular, I wish to say that I knew nothing whatever about it. I spoke to Mr. Grindley about it, and asked him would it be well to telegraph to THE CHEMIST AND DRUGGIST repudiating it; but Mr. Grindley said that telegrams were often misunderstood, and that it would be better to wait for this opportunity of doing what he has done to-night. I repudiate this circular on principle, as I would not use anything in the shape of slander or take from the honour of my opponents. (Applause.)

Mr. WELLS: Mr. Grindley and Mr. Kelly have spoken for themselves, and I claim the right of speaking for myself, and also for Mr. Montgomery, Mr. Tate, Mr. Mitchie, and Mr. Brittain. I say that none of us knew anything whatever about the circular in question—where it came from or who wrote it.

Mr. ROBINSON mentioned that the circular was one purporting to come from the "Pharmacy Protection Association."

Mr. BERNARD: The Society should find out who the persons are that call themselves the "Irish Pharmacy Protection Association" as a cover for their libels. There is no such society in existence. There is no doubt that by offering a reward and searching the printing-offices of Dublin—for I believe it was printed in Dublin—they could be found out.

Mr. MCKNIGHT: As one of the persons named in this circular, I was thoroughly astonished that the names attached to it should be associated with such a scurrilous document. That Mr. Montgomery should be associated with it, or Mr. Kelly—whom I thoroughly appreciate—or Mr. Wells, or Mr. Tate, I could hardly believe when I read it. Not one of those gentlemen repudiated it until a letter

was sent to two or three of them from a solicitor's office. I believe Mr. Wells has not repudiated it through that channel yet.

Mr. WELLS: As a point of fact, I may say that I have replied to the circular. I got it on Saturday morning, and my solicitor got it on Saturday night.

Mr. MCKNIGHT: The repudiation only comes when the election is practically over. It is not fair to the honest candidate who tries to do the best he can for the Society. I think you should direct the solicitor of this Society to find out who they are, and if you do not I shall find out for myself.

Dr. WALSH: As President of the Dublin Chemists' Federation, which has been recently formed, I wish to say that that society has nothing whatever to do with it. (Hear, hear.)

Mr. O'SULLIVAN: I am identified with the Assistants' Association, and have, on their behalf, to repudiate any knowledge of the circular in dispute.

The PRESIDENT: Mr. Robinson has complained of the officers not having repudiated the matter. As far as I am concerned I never received a copy of the circular, and was practically in ignorance of it; and I don't see how your President and your Registrar could be called on to repudiate documents of which they had practically no knowledge.

ADMITTING THE "C. & D."

The PRESIDENT then mentioned that he had received a card from the Editor of THE CHEMIST AND DRUGGIST, who would like to be present at the meeting. (Applause.)

A motion for the admission of Mr. Wootton was then put and unanimously assented to.

RESULT OF THE ELECTION.

At 9.30 the scrutineers handed their report to the President.

The PRESIDENT: The number of votes recorded for each candidate was as follows:—

Mr. Grindley	...	...	121	Mr. Michie	...	...	99
Mr. Wells	...	...	119				
Mr. Kelly	...	...	116	Mr. Hayes	...	...	30
Mr. Montgomery	...	...	116	Mr. Conyngham	...	...	23
Mr. Tate	...	...	106	Mr. McWalter	...	...	16
Mr. Brittain	...	...	99	Mr. McKnight	...	...	16

I declare the first seven gentlemen to be duly elected.

The reading of the address was then proceeded with.

PRESIDENTIAL REVIEW.

The PRESIDENT, after alluding with thankfulness to the fact that his health had remained such as to allow him to retain the office and to discharge most of its responsibilities, said: Gentlemen,—When I was installed I may say there appeared no prospective electrical excitement, and the atmosphere appeared clear, with a promise of pharmaceutical sunshine, and I think that prognostication has not been belied.

COMPANY PHARMACY.

Mr Godden, President of the Incorporated Law Society, in his Presidential address at Sheffield last year, dealt largely with the question of limited companies, and reading that address convinced me that limited companies have no legal right to carry on the business of a pharmacist or chemist and druggist, as in no sense could it be construed

that seven unqualified persons combined for doing so were combined for a "lawful purpose," which is the primary condition required by the Act. Our difficulty is to get at them after registration. The Registrar does not make any inquiry as to the legality of the purpose, and the onus rests on others to prove the illegality, but the law does not provide a means of doing so; on the contrary, the only persons protected are the members and the creditors. They can appeal to the Master of the Rolls. It occurred to me we could do so, but we are advised not, as the company, when registered, is in the same position as if it had a special Act of Parliament. But I am certain it was never contemplated that a company formed at the "pleasure" of its members should be able to override the Parliamentary rights either of individuals or of other corporate bodies. The entire question hinges on this important point, and it is only through Parliament that this point can be settled.

Our first step was to write the Registrar of Joint-stock Companies, and having had his reply, we sent it to the House of Lords Committee which was sitting on the Companies Acts Amendment Bill, and asked to be allowed to give evidence. This being refused, we addressed a circular with copies of the correspondence to each of the Licensing bodies, the British Medical Council, the British Medical Association, to each member of the Houses of Lords and Commons, and to the Press. The British Medical Association resolved to support our action, on the motion of Mr. Victor Horsley; and after a little hesitancy the British Medical Council resolved to take action, and have approached the Board of Trade. Doubtless their pressure will be beneficial, but they are anxious to draw and maintain a line between their position as a "profession" and ours "as traders." It was for this reason I was, and expressed myself, the more indignant at the proposition of the Lord Chancellor, the apparent purpose of which was to deal with us separately, and differently. Following the circular your Council drew up a petition to both Houses of Parliament, informing them of the contempt which was put upon the law in this country through the fact that incriminated persons covered themselves by incorporation; and these petitions were duly presented, in the House of Lords by the Right Honourable the Earl of Mayo, and in the House of Commons by the Member for the University of Dublin, William Lecky, Esq., M.P., but no action was taken in the House of Commons. I believe if we are to effectively watch legislation we must retain the services of a special Parliamentary agent, who will advise us of what is doing, and will, when it is necessary for us to interview the members, attend with us, and procure the necessary introductions.

In the House of Lords our petition was well to the front, and had the effect, at all events, of obtaining acknowledgment that the matter required dealing with.

I think it only proper to acknowledge the important assistance we received to strengthen and point our case from the "Ulster Chemists (Limited)," they having afforded us an ample illustration of our case. An apprentice sold for them cyanide of potassium, without conforming with the requirements of the Poisons Act, which the purchaser subsequently ate. This was duly reported to us by the local police, and we forwarded the case to the Inspector-General, who was advised not to prosecute. We forwarded a copy of his reply to Mr. Field, who asked a question in the House about it, and was informed that if the Society thought fit, we should prosecute. We returned for answer the question—"What section of our Act requires us to prosecute under the Poisons Act?" Mr. Field was not in the House when we forwarded him the second question, so it was not put, but he lodged the papers in the Irish Office, and was informed that they would be attended to. We also drew the attention of the Attorney-General directly to the case, and we received from him a similar reply. As no steps have been taken in the case, I presume they are reserving it for an amendment of the law in future legislation. That the unqualified assistant can be reached, as in the recent Belfast cases, does not affect the Society's principal contention, except that it emphasises the fact that the persons keeping open shop and the seller must be qualified.

The Pharmaceutical Society of Great Britain are at one with us on this question. We are practically one on the matter of poisons, and it is for this reason I have confined all argument to that level. If we win on the low ground

we carry the higher position, though the converse might not be the case, and I hope the ventilation of the question will ensure to the Society of Great Britain the pharmacy privileges that we possess.

POISONS LEGISLATION.

Not only had we this company-question to deal with, but we had also a Bill introduced by the President of the Privy Council to "Regulate the Sale of Poisonous Substances," the effect of which would have been the practical cancelling of the Poisons Act and schedule, and the opening up of an era of free trade in poisons—a complete reversal of the policy of the present pharmacy and poison laws. I immediately wrote, on behalf of the Society, a remonstrance, and the British Society resisted the Bill; and we hope that our remonstrance has had more effect than that of only staying the measure for a season.

The meeting of the Health Congress of the Royal Institute of Public Health afforded an opportunity of bringing the question before the public. I was asked to discuss the question of "legislation as regards the distribution of poisons" before the Congress, and submitted my paper in the "Chemistry and Meteorology section," which had the good fortune of having Professor J. W. Moore, M.D., as President, and I may say no one could have been more pretentious as to the honour of your President than he was. No sooner was it read than Professor Moore, as President, pronounced it the most important paper read at the section, and moved that the recommendations be approved and sent forward to the general meeting of the Congress.

Before leaving the political atmosphere it is right to refer to the by-election for the Stephen's Green division. As soon as the candidates were selected I summoned a law committee to consider our action. Acting on their advice I addressed identical letters to the candidates, asking them to receive a deputation to put the interests of the Society before them, and to ascertain how far they would support our rights in Parliament. We received no reply from Count Plunket. Mr. Campbell replied, appointing a time for the interview, and at the interview promised to support us, and as he fully understood the question in dispute we had every confidence he would be a help to us. I accordingly sent a circular to the pharmaceutical voters in the division, informing them of the interview and of his promise of support.

EVENING MEETINGS.

The regulations authorising the evening meetings of the Society were availed of for the purpose of holding bi-monthly meetings—one a public lecture, and one a private meeting of members for discussing questions of pharmaceutical interest.

To those members who consistently supported your Committee we are much obliged, as also to Mr. Beggs for his loan and working of the lantern on several evenings. Our private meetings were of considerable interest, and those who attended enjoyed the pleasures of association with the profit of interchange of ideas, and look forward with interest to the coming session.

EDUCATION.

The opening of the schools was inaugurated by a meeting which was honoured by the presence of the Presidents of the Royal Colleges of Physicians and of Surgeons, the Governor of the Apothecaries' Hall, and other medical gentlemen, who thereby testified to their interest in and sympathy with our Society. Sir Charles Cameron gave a very interesting and important address on the occasion, and showed how completely he was master of the history of the medical and kindred professions in Ireland, establishing the seniority of the colleges in Ireland and the advanced position of the medical, surgical, and pharmaceutical professions in Ireland 100 years back.

In response to frequent reports of Sir George Duffey, as "visitor" on behalf of the Privy Council, calling attention to weak points and low pass marks in various subjects of the Preliminary examination, the Council have, on the recommendation of the School Committee, resolved to raise the standard of that examination, and have sent forward amended regulations to the Privy Council for approval.

THE NEW B.P.

The issue of the new Pharmacopœia in the course of the year, and its becoming the legal standard of medical require-

ments as soon as gazetted, necessitated its recognition in the examination held in July. Considering the short time which candidates had for its digestion, the success at that examination speaks well for the diligence and intelligence of the successful candidates. This is not the occasion to criticise the work, but it is a suitable one to repeat our protest that a work with the suitability and practicability of which, as most intimately concerned, we are most competent to express an opinion, should not be irrevocably issued until the retail pharmacist has had an opportunity of at least expressing an opinion upon it, and of criticising those parts which he sees to be objectionable.

ABOUT DINNERS.

Last year was inaugurated what is hoped will be our annual dinner, at which thirty-eight, including guests, sat down and spent a very enjoyable and social evening.

As President of your Society I accepted the invitation of the President and Council of the Pharmaceutical Society of Great Britain to dine with them at the Hotel Cecil, where I was welcomed and received with all the cordiality and honour which this Society could expect. What I saw and heard during that visit convinced me that in Ireland we enjoy a position with regard to the medical profession which is not held by pharmacists anywhere in Great Britain, in that the Irish practitioner prescribes and leaves the dispensing to the pharmacist. In fact, I think I would be safe in saying that the idea of a dispensing-physician would be tabooed. This is a relation which we should be careful that no act of ours should endanger. In England the reverse has been the long-established practice, and is difficult to uproot.

OUR SCHOOLS

have been conducted with the usual care and ability of the Professors, Dr. Tichborne and Dr. Falkiner, with their assistants, Mr. Kelly, L.P.S.I., Mr. Kerr, B.A., T.C.D., and Mr. Henry O'Connor, L.P.S.I., and have been of much benefit to the students in their preparation, for the examination, as their successes indicate. It is the desire of the Council that those classes should not either encourage or facilitate a system of "cram," but that what is taught should be thorough, so that the student may be able to use the knowledge in any difficulty which is presented to him in after practice. We believe our teachers honestly endeavour to qualify the students not only for the purposes of the examination, but to place them in a position to be able to go to the bottom of the subject if they will but apply themselves and follow up the teaching they receive.

The requirements of the new Pharmacopoeia will have their effect on the examinations, which in turn will require extended knowledge. Whether this may be met by another special class or by distributing the subjects in the present classes I cannot say; but I fear it will in any case increase the cost of education, but betterment in education is of more importance than the saving of a few pounds.

The cost of our lectures and licence to the Irish pharmacist is 15*l*; that of student course alone in the British schools for the courses taken separately amounts to 48*l*, and if the courses are taken at once to 41*l*. It must be admitted that the difference in cost represents the difference in value, but the inference is that if we are to give the equivalent value it must be paid for.

OUR QUARTERLY EXAMINATIONS

have been held in compliance with the regulations. For the Preliminary 95 candidates presented, of whom 51 passed, and 20 entered on other certificates—total, 71. For the Licence 60 candidates presented, of whom 27 passed. For the Registered-druggist examination 27 presented for examination—21 at Belfast, of whom 14 passed; 6 at Dublin, of whom 4 passed.

The total number of passes was 8 fewer than the preceding year.

For the assistants' certificate 7 presented and 5 passed.

THE GOLD MEDAL.

The winner of the silver medal this year very nearly attained to the gold, but fell short by one mark.

MR. ARCHIBALD CLARKE ROSS

passed with 90 per cent. in botany and materia medica, 77

per cent. in chemistry, and 72 per cent. in pharmacy—a total of 239, or 79.66 per cent.

This year we have lost the services of Mr. A. E. Doran, L.P.S.I., as Examiner in Chemistry, and we have elected Mr. Alec Forbes Watson, B.Sc., whose appointment has been approved by the Privy Council.

The vital statistics of the Society are represented by the following figures:—

	On Register.	Sept. 30, 1897.	Sept. 30, 1898
Licentiates	...	549	577
Chemists and druggists	...	299	294
Registered druggists	...	424	440
Assistants...	...	17	22
		1,289	1,333
Members	...	148	161
Associate-druggists	...	52	50
		200	211

We have lost by death:—

Chemists and druggists	...	5
Registered druggists	...	2

Within the last fortnight we have learned from our trade-journals, and privately, of the sad death of Mr. E. P. Murray, J.P., a licentiate and member of the Council. He did not attend our meetings often, but when he did his information as to the country trade and conduct of law-proceedings in county courts was appreciated and of considerable assistance.

Before concluding, I desire to acknowledge the support which I have received from each member of the Council during the past year, especially from the members of the various committees, and the promptitude with which they have answered my call on every occasion; the ready assistance of your Vice-President, who undertook the responsibility for two of the committees; and, lastly, the efficient and willing services of your Registrar, who, owing to our evening meetings and heavy parliamentary correspondence, was severely taxed throughout a time when, in preparing the Calendar, he was very much pressed by routine-work.

THE PRESIDENT WAS NOT ACCURATE."

Mr. MCKNIGHT said the address was very able and brilliant, but there was one statement in it which he would like to rectify. He did not believe that the President was capable of uttering anything that he did not believe to be true, but he was not accurate when he said that the "Ulster Chemists (Limited) was an amalgamation of discontented druggists combined with a few chemists and druggists and one or two pharmaceutical chemists thrown in to give a colour to it." He was sure the President did not desire to mislead the licentiates.

The PRESIDENT: I certainly accept the correction, but my regret is the greater that there are so many as eight pharmaceutical chemists in the company.

THE PRESIDENT THANKED.

Mr. ROBINSON said that as a member of the Pharmaceutical Society he was not particularly grateful to the members, and they did not care very much about him; but he thought there should be no acrimonious discussion on the President's address. He thought the President had admirably avoided contentious matter, and that it would have been beyond the brains of all the men he knew connected with the Society pounded into one to have said less than he had done in the nature of unpleasant reference to limited-company trading. The Society and the Council had been exceedingly fortunate in their President. Mr. Downes had maintained the high traditions of his office, and had put the Pharmaceutical Society more prominently before the country—whether for good or evil—than any President before him had done; and those who approved of his policy—and they were evidently a large proportion of the members—were indebted to him for the work he had done. He had pleasure in proposing that the very best thanks of the Society were due to the President for his very able address and for his conduct in the chair and the Council chair during the past year. (Prolonged applause.)

Mr. KELLY said it gave him the greatest possible pleasure to second the vote of thanks to their worthy President.

During his year of office he had scarcely been absent from one meeting of the Council; he had attended every committee meeting; and the forbearance—he might say the enderness—with which he sometimes acted in cases showed that he was a man of deep thought, and evidently anxious to do what was right. He seemed to take the deepest interest in every feature connected with the education of the rising pharmacist; and if there was a man in Dublin who desired that the pharmacist should be a fit companion for the medical man he would say it was Robert J. Downes.

The motion was put by the VICE-PRESIDENT and unanimously carried.

The PRESIDENT, in acknowledging the vote, said he had done his best; and all that he did he did heartily, and with a wish that the Society itself should prosper as opposed to what he might call individual interests. He never allowed individual interests—either his own or those of others—to conflict with what he considered to be for the good of the Society itself. With regard to his position on the company question, it had been clear throughout. He took his stand on the Act of Parliament which required that the proprietor or proprietors of a pharmacy or of a drug-business should be qualified men. Until the general pharmacy question was settled, and as long as there could be a mixed company of pharmaceutical chemists under the Acts, they could not distinguish between one limited company and another.

THE TREASURER'S STATEMENT.

Mr. GRINDLEY, as Hon. Treasurer, then submitted a statement of account for the year, which gave details of receipt and expenditure as to subscriptions, pupils' fees, school outlay, professors' fees, &c., and showed a balance to credit in the capital account of 1,217.

On the motion of the VICE-PRESIDENT, seconded by Mr. T. O'SULLIVAN, the accounts were unanimously adopted.

OUT OF ORDER.

Mr. S. GIBSON, associate druggist, submitted the following motion, pursuant to notice:—"That immediate steps be taken to amend Regulations 5, 9, and 10, relating to election of Council."

The PRESIDENT: I rule that out of order, and ask Mr. Gibson to pass on to his second notice of motion.

Mr. GIBSON: On what grounds do you rule it out of order?

The PRESIDENT: First it is mandatory, and we have no mandatory powers. Secondly, it does not say what form the amendments are to take. If it were a request or recommendation to the Council, the matter would be in a different position, but we cannot entertain it as it stands.

Mr. GIBSON: I think you would be quite in order in allowing me a few words.

The PRESIDENT: I will not. I have made a rule that it is out of order, and I will not have my ruling questioned.

SEVEN SEATS FOR THE DRUGGISTS.

Mr. GIBSON then moved:—"That this meeting requests the Council that in co-opting new members attention be given to the claims of the registered druggists to seven seats." This was not the first time that he had advocated the claims of the druggists of Ireland at that Board, and he was sorry to say that those claims had received scanty justice from the Society. There were at present on the register 734 members of the druggists' body, whilst there were only 577 pharmaceutical chemists. Those numbers entitled the druggists to representation on the Council, and yet they had no representation at all. Nominally they were given two men; but they did not represent the North of Ireland druggists, and until they were given representation on the Board they would not be in sympathy with the Society. If they wanted to command the respect of the country at large they should give representation to the whole country. The Society were forgetting that they were not a private clique for selfish ends, but were—or ought to be—a Government institution, and that they were brought into existence to use their influence that it would tend to the public benefit. Therefore, once again—though it might be in vain—he appealed to them to give the druggists of the North of Ireland the representation on the Council they were entitled to.

Mr. MCKNIGHT: I have pleasure in seconding it.

Mr. CONYNGHAM said he did not at all blame any member of the Society for not having voted for Mr. Hayes and himself. Whether they were under a wrong impression or not, he believed that the great bulk of them voted in accordance with what they believed to be right, and as his friend Mr. Robinson had said that there should be no unpleasantness that night he would ask Mr. Gibson to think of what he said. By law only seven druggists could be on the Council. He (Mr. Conyngham) thought there ought to be more. But it lay entirely with themselves. (Hear, hear.) They had the power in their own hands, and could turn the election entirely, and put on the Council whom they liked, if they only paid their guinea a year each.

Mr. WELLS said it was not necessary to reply generally to Mr. Gibson's remarks, because they replied to themselves. But, as regarded the intention of the Legislature, Mr. Gibson was distinctly told that if the druggists wanted representation they should pay for it. It was the man who paid the piper that could choose the tune. He believed that at present the Society had the sympathy of the majority of fair-minded druggists; and they certainly had the sympathy of a large number of the pharmaceutical chemists. Let Mr. Gibson go home to the North of Ireland and tell the druggists there to loyally stick to their own business and leave compounding alone, and then they could come with more reason to demand better treatment. Let the druggists stick to their own business, and then they could be united. At present the druggists had two representatives on the Council, one being Mr. Turkington—(applause)—whom they were all pleased to have on it; but on account of the distance from Dublin at which he lived, he had not been able to be with them lately. The pharmaceutical chemists respected him because they knew he did not dispense prescriptions.

The PRESIDENT said Mr. Gibson had spoken of their new members as "voting-machines." That was a most disorderly expression, and not applicable to any member of the Council. The members of the Council voted as they thought right.

The PRESIDENT then put Mr. Gibson's motion, which was negatived.

The next business was the following notice of motion in the name of Dr. McWalter:—

That as the members of this Society are aware that the practice of drinking methylated spirit is largely on the increase in Dublin and elsewhere, they consider that in future it should be sold only under the regulations which govern the sale of poisons.

Dr. MCWALTER said the above proposal was one of a series of reforms which he thought would be beneficial to both chemists and druggists; but as those reforms had been repudiated, he did not think it would be fair to take up time by pressing his resolution, and he therefore withdrew it.

This concluded the business of the annual meeting.

The Annual Dinner.

THE second annual dinner of the Society was held at the Shelbourne Hotel, Dublin, on Tuesday evening, October 4. The company numbered over forty, and included Mr. Field, M.P., Mr. J. H. Campbell, M.P.; Sir G. Duffey, M.D., President of the Royal College of Physicians of Ireland; Sir C. Cameron, M.D.; Mr. R. L. Swan, President of the Royal College of Surgeons of Ireland; Professor J. W. Moore, M.D.; representatives of the Press; most of the Dublin members of the Council; Mr. McKnight and Mr. S. Gibson, from Belfast; and Mr. Connor, from Newry.

After the toast of "The Queen" had been honoured,

The PRESIDENT proposed "The Houses of Parliament." He said they had a grievance against both Houses, in that they had addressed both but neither had deigned to reply. They were willing to give the House of Lords another couple of years of life, but they were hoping for better things from the House of Commons. He was sure they could rely on both their members to assist them when the necessity arose.

Mr. CAMPBELL, M.P., said he differed with Mr. Field on many points, but in matters concerning the city and the country Mr. Field had done excellent service. Moreover, his own experience in the House of Commons had not been long enough to enable him to discover the use of the House of Commons to the community. He wished to say a word

concerning the President. He had known him for many years, and had always respected him, especially for what he regarded as his innocence and simplicity. Since he had become a member of Parliament he had discovered that Mr. Downes's innocence and simplicity were really the guile of the heathen Chinee, assumed to better accomplish the ends of the Society. Joking apart, however, he considered the work of the Pharmaceutical Society of Ireland was an illustration of what a small but united body could do for the promotion of their interests when those interests coincided with the interests of the public at large.

The next toast was that of "The Presidents of the Royal Colleges of Physicians and Surgeons of Ireland," and the CHAIRMAN said they valued the presence of these gentlemen with them, as it represented to them that they had with them the sympathy of the profession. He assured them that the Pharmaceutical Society had no desire to encroach in any way on the work of the medical profession, or to encourage pharmacists to ape the doctor.

Sir GEORGE DUFFEY, in responding as President of the Royal College of Physicians of Ireland, traced the association of the College with the Pharmaceutical Society. It had always had a kindly feeling for the Society, which might almost be said to have had its origin in the Royal College of Physicians. In its early years the College had given the Society a home, and had also given to it its first president, Sir Dominic Corrigan, and its first vice-president, Dr. Aquila Smith. Sir George Duffey said his personal connection with the Society had extended over seventeen years, four years as an examiner, and the last thirteen years as the Privy Council visitor, so that he almost felt as one of them. The Pharmaceutical Society of Ireland had done a good work, evidence of which could be seen in the better pharmacists and higher-class pharmacies which might be found throughout Ireland.

Mr. SWAN, President of the Royal College of Surgeons in Ireland, also briefly replied.

The next toast on the list was "The Pharmaceutical Society of Great Britain," and the PRESIDENT, in proposing it, said they had hoped to have had the company of the President of that Society. His many other engagements, however, had prevented his attending. He should, therefore, call upon Mr. Simpson, a former member of the British Society, to respond.

Mr. SIMPSON said it was so long since he had been associated with the Pharmaceutical Society of Great Britain that he had lost touch with it. He knew, however, that it was a great Society, and had laboured long to attain its present prosperous condition.

Sir GEORGE DUFFEY, in proposing "The Pharmaceutical Society of Ireland," paid some warm compliments to its President, though he said he could only endorse what Mr. Campbell had already said concerning him. In the course of his remarks, Sir George said he was a careful reader of the trade journal, and he was sure he derived great benefit from this exercise; but he must say he was often puzzled by the mysterious initials which he often found there, such as P.A.T.A., C.A.M.W.A.L., and others. But there was one set of initials which he had met with, and which he thought particularly applicable to their Chairman. He would designate him the G.O.M. of Irish pharmacy.

The PRESIDENT said it was not for him personally to overshadow the Society. He acknowledged gratefully the debt the Society owed to the Royal College of Physicians, who, as Sir George Duffey had reminded them, had cradled them and watched over their infancy. They had passed through the stages of childhood, of boyhood, and of young manliness, and had now reached the maturity of manhood. They had striven to provide competent men for the public service and to do the work which Parliament had given them to do. He felt very much gratified at the gracious words which Sir George Duffey and Mr. Campbell had spoken concerning himself.

"Science" was the next toast, briefly proposed by the PRESIDENT, who called on Sir Charles Cameron and Dr. J. W. Moore to respond. Sir CHARLES CAMERON said they took it as a compliment to be called upon at a moment's notice to respond for such a subject. He should confine himself to the science of pharmacy. In old times remedies were chosen for their noisome and disgusting qualities; crabs' eyes, toasted wood-lice, and such-like drugs were the ingre-

dients selected for their medicines. Even in his own youth he would rather undergo a minor surgical operation than take a dose of medicine. The modern science of pharmacy, with its bi-palatinoids, tabloids, colloids, and other "oids," had made medicine so pleasant that it had become a pleasure to take it. Therefore they had done much to ameliorate the condition of their fellow-creatures.

Dr. MOORE also responded. The guests were next welcomed by Professor TICHBORNE, and for them the principal spokesman was

Mr. FIELD, M.P., who said Sir Charles Cameron, who was as good at a pun as he was in science, had remarked that he guessed he was a guest. Sir Charles ought to have included gastronomy in his speech on science; he was an authority on that subject. He (Mr. Field) was convinced of the good work the Pharmaceutical Society was doing. In this age of competition it was necessary for every trade and profession to organise and combine, and in his opinion this was especially necessary in pharmacy. They ought to get a pharmacist in the House to voice their wants. They wanted more doctors, too, in the House of Commons. For his part he was quite ready to swap an odd lawyer or two for a few more doctors. He liked these dinners. They made people know each other. His experience of public life had taught him that when he came to know people he found them all much better than he thought.

Mr. CLAY, Dr. O'DONOVAN, and Mr. BUTLER (one of the singers) also responded.

"The Press" was proposed by Mr. BEGGS (Vice-President), and was associated with the names of the Editor of THE CHEMIST AND DRUGGIST and Mr. Macartney, of the *Freeman's Journal*. Sir C. CAMERON proposed the health of Mr. Ferrall, the Secretary, and the meeting concluded with hearty cheers for the President.

Quartettes were sung in the course of the evening by Messrs. Butler, Gilligan, Grindley, and Wells, and several comic songs were cleverly rendered by Mr. Murchison.

Council-meeting.

At the Council-meeting, on October 5, Mr. Downes was re-elected President, Mr. Beggs Vice-President and Mr. Grindley Treasurer. The gold medal was awarded to Archibald Clarke Ross for the best answering at the Licence examination; the silver medal to Matthew Campbell, with 237 marks. On the motion of Mr. Bernard, an index of pharmaceutical chemists, licentiates of Apothecaries' Hall, chemists and druggists, and registered druggists keeping open shop for the sale of poisons was ordered to be prepared.

October Examinations.

THE Boards of Examiners met last month in order to conduct the various examinations, with the following results:—

PRELIMINARY.

Eleven candidates were examined; seven failed, and the following four passed:—

Robinson, C. W.	} equal	Martin, T. J.
Swenarton, W. L.		Gilmour, J. A. W.

REGISTERED DRUGGISTS.

Twelve candidates were examined; six failed, and the following six passed:—

Anderson, S. R.	Haslett, H.	
Blair, R.		Marshall, G. M.
Hamilton, G.		Young, W. K.

PHARMACEUTICAL LICENCE.

For this examination there were five candidates, of whom three failed, and the two following were declared qualified to be licensed as pharmaceutical chemists:—

Knight, W. F.	Morrissey, J. P.
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The Month's News.

Failures.

The creditors of Mr. William Moss, wholesale druggist, Roe Street, Clifton Park, Belfast, have agreed to accept the bankrupt's offer of 7s. 6d. in the pound, payable in three equal instalments.

Patrick J. McKeown, Toomebridge, Antrim, druggist and general merchant, has presented a petition for arrangement. Liabilities unsecured, 650*l.*; estimated net assets, 260*l.* The following are scheduled as creditors:—

	£	s.	d.
Allen, James, & Co., Belfast	17	16	2
Birney, E., Belfast	55	0	0
Clarke, John, & Co., Belfast	18	6	10
Oraig, Daniel, Toomebridge	30	0	0
Irish Distillery, Belfast	30	0	0
McKeown, Felix, Toomebridge	200	0	0
Murray, Sons & Co., Belfast	14	4	0
Neill, Abraham, Belfast	21	12	8
Pratt & Montgomery, Belfast	23	3	7
Savery & Murphy, Belfast	12	0	0
Shaw & McMullan, Belfast	39	0	0
Smith, G., & Co., Dublin	11	16	5
Taylor, W. & M., Dublin	23	19	4

The New Councillors.

We give portraits of the new members of the Pharmaceutical Council of Ireland, whose election is recorded on



MR. BRITTAIN.



MR. MICHIE.



MR. TATE.

p 138 Mr. Francis William Brittain, of 84 West Street, Drogheda, is a pharmaceutical chemist whose registration dates from 1893. Mr. James Michie is also a pharmaceutical chemist, and the owner of the Medical Hall, Blackrock, co. Dublin. Mr. Michie is a Scotchman, and holds the Minor qualification of Great Britain, which he obtained in 1886, two years before the Irish Licence. Mr. James Tate, of 9 Royal Avenue, Belfast, goes to the Council with twenty-one years' experience as a pharmaceutical chemist, he having been amongst the first to take the Licence—in fact, of those elected last month only Messrs. Grindley (May, 1876) and Montgomery (April, 1876) are senior to Mr. Tate (April, 1877) in registration, Mr. Wells (October, 1877) coming next.

Dublin Chemists' Federation.

This Association has been formed to do for the drug-trade of Dublin and district what the P.A.T.A. is doing in Great Britain. A meeting was held in the Pharmaceutical Society's house on October 19, Dr. J. A. Walsh (President) in the chair. Rules had been prepared by Dr. Walsh, and were submitted by him and approved. They are twelve in number, and are of the usual character. The membership of the Federation is open to wholesale druggists, pharmaceutical chemists, apothecaries, chemists and druggists, and registered druggists, the object being to further all matters of

trade interest and to act in sympathy with the objects of the Proprietary Articles Trade Association. Annual subscription, 2*s. 6d.* In the course of discussion, the Chairman said that the Federation, having been formed at the suggestion of Mr. Glyn-Jones, the P.A.T.A. had a sort of claim upon it, but at the same time they reserved to themselves the right to go outside the area prescribed by the parent Association. It would not, in his opinion, be essential that members of the Dublin Federation should belong to the P.A.T.A. A conversation followed on "cutting." Mr. Samuel P. Boyd, M.A., was unanimously elected Vice President *in absentia*; and it was resolved, on the motion of Dr. J. C. McWalter, seconded by Mr. R. T. White—

That the members of the Federation bind themselves to push the sale of articles on the P.A.T.A. list rather than those not appearing thereon.

A copy of this resolution is to be sent to wholesale houses.

Pharmacists' Assistants' Association.

The third annual meeting of this Association was held in the Pharmaceutical Society's house on the evening of October 21, Mr. Henry Hunt presiding during the preliminary proceedings, Mr. G. G. Fetherston, Ph.C., taking the chair while the annual reports were being considered. Mr. Fetherston paid a tribute to Mr. W. J. Hardy, the ex-President of the Association, who since last session has gone to Belfast. Mr. W. Vincent Johnston read the annual reports. That of the committee showed the various meetings of the past year to have been successful in every respect, especially the social functions; and, in regard to the more serious

meetings, while the attendance was satisfactory, the committee look for some improvement here during the ensuing session. With reference to subscriptions, the committee had thought it advisable to fix a certain date at which they would be due, so as to save expense in getting them in. The committee acknowledged the kindness received at the hands of the Pharmaceutical Society's President and Council, and trusted the cordial relations between the two bodies would long continue. The Treasurer's report showed that the Association started the session with a credit balance of 11*l. 19s.*, and, by receipts from various sources, this was increased to 84*l. odd.* The expenses were 74*l. odd*, leaving a balance in hand of 9*l. 10s. 5d.* Although the figures were less than in the previous session, owing to the wholesale houses not being appealed to, the subscriptions from members were more numerous.

Mr. Henry Hunt was elected as President for the ensuing year, Mr. J. Tyrie Turner Vice-President. Messrs. R. J. Savage and J. Jessop Hon. Secretaries, and Mr. W. McCarthy Honorary Treasurer. A committee of management, consisting of the following members, was also elected:—Miss Ada Wyatt, Miss C. M. Jessop, Messrs. J. H. Williams, H. J. Aubrey, D. O'Sullivan, W. U. Smith, J. W. McClean, W. Jones, F. Maxwell, J. O'Farrell, F. Barrett, C. A. Bowles, J. Warren, G. T. Nagle, H. C. Meyrick, W. J. Duuwoody, D. M. Watson, J. T. Chamberlain, Taylor, and Yoxall.